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PAPER TRADE JOURNAL

PAPER
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Is Combined with Paper Trade Journal

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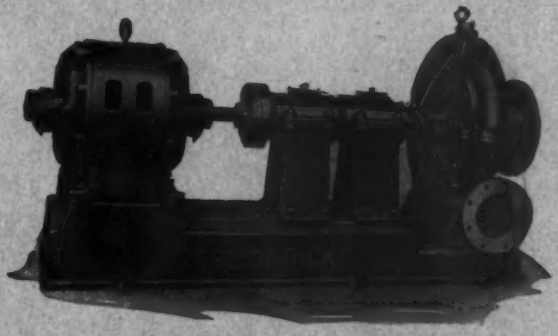
TREAT 'EM ROUGH—THEY LIKE IT



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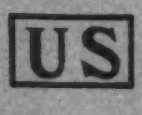

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PAPER TRADE JOURNAL
ESTABLISHED 1872
THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD
FIFTY-THIRD YEAR
Published Every Thursday by the
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PAPER TRADE JOURNAL

With Which Is Combined

PAPER

Vol. LXXX. No. 15 — Thursday, April 9, 1925

The Magazine of the Paper Industry

U. S. Production of Paper Fell Off During February

Reports Made by Mills to The American Paper and Pulp Association Showed February Production to be Eight Per Cent Less Than for January—Decrease Extended to All Grades—Previous Month had Shown a Seven Per Cent Increase Over December—Table Showing Detailed Figures with Comparison Records for the Month of January.

The February production of paper in the United States as reported by identical mills to the American Paper and Pulp Association and cooperating organizations, showed a decrease of 8 per cent compared with January's production following a 7 per cent increase in January over December, according to the Association's Monthly Statistical Summary of Pulp and Paper Industry. All grades showed a decrease in production as compared with January.

The Summary is prepared by the American Paper and Pulp Association as the central organization of the paper industry, in cooperation with the Binders Board Manufacturers Association, Converting Paper Mills Association, Cover Paper Association, Newsprint Service Bureau, Wrapping Paper Manufacturers Service Bureau and Writing Paper Manufacturers Association.

The figures for February for same mills as reported in January are:

Grade	Number of Mills	Production Net Tons	Shipments Net Tons	Stocks on Hand End of Month—Net Tons
News Print	65	113,805	114,027	25,883
Book	63	85,260	87,097	39,824
Paperboard	108	107,754	107,868	28,110
Wrapping	84	50,082	51,685	60,719
Bag	26	9,751	10,164	6,186
Fine	82	27,878	29,188	40,496
Tissue	45	11,648	11,657	10,923
Hanging	8	3,903	4,030	1,763
Felts	20	18,089	18,157	3,745
Other grades	63	19,910	20,430	13,627
Total all grades		448,080	454,303	231,276

During the same period, domestic wood pulp production decreased 14 per cent, this decrease being distributed over all grades. The February totals (mills identical with those reporting in January), as reported by the American Paper and Pulp Association, are as follows:

Grade	Number of Mills	Production Net Tons	Used Net Tons	Shipments Net Tons	Stocks on Hand End of Month Net Tons
Ground wood pulp	100	74,057	71,686	3,827	100,613
Sulphite, news grade	38	34,972	36,465	2,338	8,479
Sulphite, bleached	20	20,926	18,543	2,103	3,282
Sulphite, easy bleached	6	5,915	5,412	471	1,643
Sulphite, Mitscherlich	4	3,414	2,650	653	894
Sulphate, pulp	10	12,552	11,431	1,109	3,713
Soda pulp	10	14,591	12,092	2,885	2,002
Other than wood pulp	2	11	54	.....	23
Total—all grades		166,438	158,333	13,386	120,649

International Paper Co. Makes Report

The International Paper Company and subsidiaries for year ended December 31, 1924, reports net income of $2,532,656 after interest, depreciation and reserve for contingencies and federal taxes, equivalent after preferred dividends to $5.16 a share earned on $20,000,000 common stock. This compares with $3,809,540, or $11.59 a share, on $19,931,984 stock outstanding in 1923. Surplus after payment of preferred dividends was $1,032,656, against $2,309,540 in previous year.

In his report to stockholders, A. R. Graustein, president, said in part:

"The price of news print on July 1, 1924, was reduced from $75 to $73 a ton. During the second half of 1924 our plants operated at a relatively low percentage of capacity. On January 1, 1925, the price of news print was further reduced to the present figure of $70 a ton. The reduction will adversely affect the earnings for 1925, but, on the other hand, all but one of our paper mills are now running at substantially full capacity.

"The total production of paper during the year 1924 aggregated 434,288 tons as against 537,927 tons in 1923. The reduction is partly due to the fact that on February 1, 1924, your Rumford Falls plant, with a normal annual capacity of 58,400 tons, was sold to the Continental Paper & Bag Corp.

"The Sherman Island power development has been in successful operation throughout the year. The Moreau Manufacturing Co.'s hydro-electric development at Feeder Dam on the Hudson River, with an installed capacity of 7,500 K. W., was completed and put into operation during the year. In this development your company has a one-third interest.

"In December, 1924, construction was started on the installation of machines 5 and 6 at Three Rivers. These machines will increase the capacity of the mill 50%. They are expected to come into operation toward the close of 1925. The plans for the installation of these machines provide for a mill of an ultimate capacity of eight machines, or approximately 700 tons a day. Though there is no single mill of this size now in existance, no difficulties in its design or operation are anticipated, and the unusual advantages of the site and the operating savings attendant upon a large production are believed to justify the ultimate enlargement of the mill to this capacity.

"Plans are under consideration for the electric development of two of our water powers."

Rescind Order Against Swedish News Print

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., April 8, 1925.—The Treasury Department has revoked its order of March 14, for bidding importations of news print paper from Holmens Bruks and Fabrics A/B, of Norrkoeping, Sweden.

The previous order has been rescinded, it is announced, because the firms have decided to allow U. S. government officials to see their books.

Montreal Hears Talk of Big Manufacturers' Combine

Sees Possible Creation in Canada of World's Strongest Combination of Pulp and News Print Manufacturers—Growth of News Print Industry Brings Rubber Products Company to Canada—Strong Protest Made to Hydro Export Tax—St. Maurice Assessment Fixed.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., April 6, 1925.—It is stated here that important negotiations are going on in New York which, if successful, will result in the creation in Canada of the strongest combination of pulp and news print manufacturers the world has ever known. The prime movers in this development are stated to be Alexander Smith, president of the Abitibi Power and Paper Company, and George H. Mead, president of the Spanish River Pulp and Paper Company.

It has been well-known for some time past that these heads have had the merger of their two companies in view, but it was not generally thought until recently that the merger would go beyond Abitibi and Spanish. Evidently their ideas have expanded considerably, as there have been rumors for several days that the scheme would also embrace the Backus interests of Western Ontario which control two news print producers, as well as Fort William, which is controlled by the Mead interest. Still more recently the Mattagami Company has been mentioned. This concern manufactures sulphite pulp, but is doubtless considered a potential producer of news print. These companies between them control very important timber areas, and it is doubtful, taking all the present holdings into consideration, whether there would be an opening for any further enterprise in that particular field. The combination would thus be a very strong one and exert a powerful influence on the news-print market for many years to come.

Would Have Powerful Influence

This combination, together with International Paper, would constitute a very powerful influence, and probably force the Quebec manufacturers to combine for their own protection.

For purposes of comparison, the news print output of the International Paper Company may be cited. After the increase of output at Three Rivers from 325 tons to 500 tons per day, the daily output of International Paper at the end of 1925 will be 1,250 tons of news print. Plans are also under consideration whereby additional mill capacity will be erected near Ottawa where 500 tons per day will be produced but this will not be brought into production for two or three years after the end of the present year. In addition to news print output, International Paper production at the end of 1925 will also include other kinds of paper, totalling about 840 tons per day, making a total of all kinds of paper of 2,090 tons.

Some idea of the magnitude of the enterprise that will result from the merger of the companies mentioned, may be obtained by an analysis of the daily production that would be immediately available. The present production of the various companies is tabulated below. From this it will be seen that the proposed merged firms will have a daily output of 1,610 tons of news print, 1,445 tons of groundwood pulp, and 580 tons of sulphite pulp, in addition to which there will be a daily output of 30 tons of wrapping paper, 6,000 sq. ft. of insulite, 35 tons of wood pulpboard, and 150 tons of excess sulphite pulp.

Companies in Proposed Merger

The largest companies in the proposed merger are Spanish River and Abitibi. The capitalization of the former consists of $9,447,000 common stock divided into $100 par value shares, $8,619,500 preferred stock and, according to the last published balance sheet, $11,496,527 of funded debt. Abitibi has outstanding 250,000 shares of no par value common stock, shown on the books of the company at $5,000,000 seven per cent cumulative preferred stock of $1,000,000 divided into 10,000 shares of $100 each, and $10,321,900 of funded debt. The Mattagami Pulp and Paper Company, Limited, has a capitalization of $2,000,000 common stock, $1,500,000 preferred and $5,785,000 of funded debt. This company has been for some years past in the hands of a receiver, the latter having been appointed by the Court on August 9, 1921. The company owns 125 square miles of freehold timber and pulpwood lands, and controls by least from the Government of Ontario 850 square miles of Crown timber lands. The company's mills are situated at Smooth Rock Falls (on the Mattagami River), and are of modern construction capable of producing sulphite pulp most economically and in accordance with the latest practice. The company has developed water power of 9,000 h.p. and has another water power site capable of developing a minimum of 4,000 additional h.p. The company's fixed assets, such as timber limits, mills, water powers, etc., have been conservatively valued at $8,000,000.

Daily Production Figures

The following table shows the daily production of the various companies, in tons:

	Groundwood	Sulphite	News Print
†Abitibi	510	140	500
*Keewatin	...	...	100
*Ft. Frances	150	...	150
Ft. William	120	...	160
Mattagami	...	150	...
†Spanish R.	665	290	700
Combined	1,445	580	1,610

†In addition to the above, Abitibi produces 30 tons of wrapping paper daily; Fort Frances, 6,000 sq. ft. of insulite; and Spanish River 35 tons of wood pulpboard, as well as 150 tons of excess sulphite pulp above own requirements.

*Controlled by the Backus interests.

Comparison of capitalization:—

	Com. Stock	Pfd. Stock	Funded Debt.
Spanish	$9,447,000	88,619,000	$11,496,527
Abitibi	250,000	1,000,000	10,321,900
	shares no par value		
Mattagami	2,000,000	1,500,000	5,785,000

Financial returns of the Fort William and two Backus concerns are not made public.

News Print Brings Industry Here

The growth of the news print industry has brought to Canada a subsidiary industry which is about to establish itself in the close neighborhood of Montreal. The new company is known as the Rubber Products Company of Canada, which has been organized to provide "Made in Canada" products of a highly specialized type required by the manufacturers of news print. This refers to rubber covering for the rolls on the big news print machines. Associated with the new enterprise will be the oldest concern in North America specializing in the application of these rubber coverings, the American Wringer Company, Incorported. It is understood that this company will arrange all the financing for the Canadian company and arrangements are now well advanced to make a start at this new line. It is understood that the operations will be carried on at Lachine. In the application of these rubber coverings it is necessary to transfer the rolls from the various mills to the shops of the company where the work is carried out. These coverings have to be renewed from time to time according to the amount and

velocity of the work carried out by the machines. Employment will be provided for a considerable force of men, as it is expected the shop will be operated to capacity from the outset.

Protests Against Hydro Export Tax

That the Conservative Opposition believes that the tax on the export of power at the rate of $1.95 per h.p. year, as proposed in the Robb budget is merely a subterfuge to enable power to be exported to the United States, was the charge made by Sir Henry Drayton, former Conservative minister of finance, in the House of Commons at Ottawa during the week. As regards the effect of the tax in Ontario he said that Canadians would have to bear the burden of it. On this point he remarked: "The Hydro Electric Commission of Ontario were obliged to enter into a contract with the American corporation that owned and controlled the development of the Niagara river on the Canadian side, and which controlled the distribution of the system on the other side of the river, whereby they agreed to supply power at a very low rate. The rates in those days were absurdly low as compared with those that are now charged and the mere fact that the Hydro Commission today has to supply power at those rates means a tremendous loss to it, a loss ranging probably from $120,000 to $180,000 a year, handling the power wholesale, and much more than that at retail. Now, the tax cannot be passed on under the contract, and this impost will simply mean an additional cost to every municipality in the province of Ontario which makes use of the Hydro Electric system. Why is this done? It is done to injure public ownership on the one hand, or is it done, on the other hand, to facilitate the export of a whole lot of power which Canada in the comparatively near future will urgently require? I hope that the Minister, on giving the matter further consideration, will withdraw that provision."

Bogus Settlers and Forest Exploitation

C. H. Dickie, of Nanaimo, speaking in Parliament at Ottawa, proposed an export tax on all timber, but no action was taken in the matter. He claimed that "bogus settlers" were coming into Canada from the United States and depleting the forests in the same wholesale manner as they had done in the United States, and then abandoning the Canadian lands they were pretending to settle. Mr. Dickie dealt particularly with the British Columbian forests and emphasized an export duty on this lumber would save Canada millions of dollars a year. He charged that the pulp reserves of central Canada would last for only 50 years or less depending upon the fire losses. His remedy was an export duty of $5 per thousand on first and second grades of fir, spruce, pine, cedar and hard wood logs, and $2 a thousand on all other logs. On pulpwood exported by farmers and settlers $2,50 a cord, with $5.00 a cord on all other pulpwood.

Fixed Assessment St. Maurice Paper Co.

The St. Maurice Paper Company is applying to the Quebec Legislature to pass an act to fix for twenty years from the first of January, 1925, the assessment of the company, in Cap de la Madeleine, Que., at $2,500,000 for purposes of municipal taxation. It is also asking to have the sum of $30,000 fixed for ten years from the first of July, 1925, as the school taxes.

Canadian Paperboard Bonds

Announcement is made that the Canadian Paperboard Company, Limited, which operates Paperboard Mills at Montrel, Frankfort, Ont., and Campbellford, Ont., has redeemed the second instalment of their outstanding $800,000 7 per cent bonds, amounting to $30,000 in accordance with the trust deed. A similar instalment is required to be taken up first of April of each year.

Box Board Association to Meet

CHICAGO, April 7, 1925.—The next regular monthly meeting of the Box Board Association will be held at 10:30 o'clock Thursday forenoon, April 16 at the Congress Hotel.

Submit Plans for Standard Paper Bag Sizes

What has been termed "the most important and constructive effort in the history of the grocery bag industry"—the Standardization of Grocers bag sizes and the simplification of the vast variety of kinds—was put into final form at a meeting of the Grocery Bag Manufacturers of the United States in the Waldorf-Astoria Hotel on Friday of last week.

At this conference, which was arranged by the Grocery Bag Simplified Practice Committee and the Division of Simplified Practice, Department of Commerce, there was presented a program of tentative standards for the cubical capacity for Self-Opening, Square and Flat styles of grocers' bags, as well as a reduction of varieties in the number of sizes.

In addition to this program developed by the Simplified Practice Committee of the Industry, there was presented a report by a sub-committee of technical experts. These engineers had developed complete information to enable any manufacturer of paper bags to make necessary changes in the adjustment of machines to produce bags of a standard minimum cubical capacity.

The program offered Friday establishes the standard minimum cubical inches capacity and standards of dimensions from quarter pound to thirty-five pound sizes of all styles of grocers' bags.

The first step by the Industry toward the development of this program was taken in November, 1923.

The Committee which has been studying Simplification and Standardization measures comprises: W. M. Crunden of St. Louis, Mo., E. M. Dickinson of Decatur, Ill., H. F. Lawrence of Middletown, Ohio, A. A. McIlvain of Baltimore, Md., E. B. Livy of Richmond, Va., C. R. McMillen, A. Calder, I. Kuhe, and B. Mintz of New York City, J. N. Harvey of Boston, Mass., and E. A. Walter of Long Island City, N. Y. W. E. Moser is Secretary of the Committee.

The technical sub-committee for developing scientific standards for cubical capacity include H. Smithwick, engineer of the Continental Paper and Bag Mills Corporation, and C. B. Sanders, secretary of the Union Bag and Paper Corporation, of New York City.

A survey by the Committee revealed in some cases a range of cubical contents of twenty-five per cent for a single size between different manufacturers.

Further plans of the Simplified Practice Committee include a presentation of the Standards which may be adopted by the Industry, to the United States Bureau of Standards with a request for formal approval and for the development of an emblem which will indicate that the product so marked will meet the Standards.

The report submitted Friday with its engineering information was declared by representatives of the Division of Simplified Practice of the Department of Commerce as of the utmost importance to manufacturers who have no engineering staff and whose machine changes must of necessity be as simple and inexpensive as possible.

The Simplified Practice Committee's program will be placed before a general conference of manufacturers, distributors and consumers to be arranged in the near future by the Department of Commerce, Division of Simplified Practice. At that time the program will be passed upon by the three groups.

The fact that the grocery paper bag industry represents an annual business of approximately $40,000,000.00, and that considerable economies are possible through standardization, made Friday's program of keen interest to a large section of the paper trade.

Bid $475,000 for Atlantic Pulp Plant

SAVANNAH, Ga., April 6, 1925.—The bid of the Georgia Pulp Company of $475,000 for the plant and assets of the Atlantic Paper and Pulp plant here, at Port Wentworth, is awaiting the confirmation of Federal Judge William H. Barrett.

The Massachusetts company is taking over the assets of the old company.

Philadelphia Paper Men Encouraged by Comparisons

Find by Looking Up Records That They Are Doing Better Than at Corresponding Time Last Year—Daring Paper Manufacturing Company Formed—Garrett Paper Corporation Plan Building Program—Consolidation of James Andrews, Inc., and The Keystone Company.

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., April 6, 1925.—Though the present situation in the Philadelphia paper distribution field is not a very encouraging one for the immediate future it nevertheless has its brighter side when a comparison is made between the present day business as compared with that of the same period of last year. While the dealers report they are not satisfied with the duller period which has prevailed within recent weeks they find some consolation in averaging up the month's sales and noting that they are slightly ahead of last year's records. This is particularly true of the coarse paper division. In fact the first quarter of 1925 shows that while in recent days the demand has been quieter the total business of the previous months bulked larger than anticipated and showed considerable increase over that of the early months of 1924.

Fine Papers Generally Quieter

Very little demand has been made on the stocks of fine papers generally. A few of the large printing and publishing houses have again entered the buyers' market but not on the scale that purchases were made in the previous months of the year. There has been a decided increase in the sales of advance orders for greetings which has materially helped in the disposition of these grades. High grade engraving papers and announcement stocks too are now being purchased for the June school and wedding demands. Prices on these grades recently were advanced from 10 to 15 per cent and are holding firmly at the higher quotations.

Approaching Eastertide has revived slightly the demand for wrappings and specialties for the confectionery and other industries active at this time. Waxed papers and tissues too are in better demand though they are not sold in an appreciable volume. Prices on tissues have been cut so low that the visiting mill men are complaining of the unprofitable business they must bear as a result of the duller time.

Despite the fact that the stock market is inactive there is scarcely any changes in the prices. A few of the grades such as Container Manila and Commons have been marked lower but the majority of papers hold firmly. Prices of rags, due to the scarcity, have been marked upward. The quieter times in the clothing and textile industries from which much of the stocks in new rags are obtained are the cause of the revision of the quotations to the higher levels. Very little of any of the grades of paper or rags are accumulated in the warehouses.

Local Merchants at New York Convention

The Quaker City Trade was well represented at the annual convention of the Paper Merchants Association held in New York during the week. Among those who journeyed to the Metropolis were:—George W. Ward of the D. L. Ward Company and executives of the various departments including Ralph G. Luff, Willard W. Seary, and W. A. Hentz; T. H. B. Smythe and Harvey E. Platt of the J. L. N. Smythe Company; Simon Walter, and Thomas F. Kennedy, Simon Walter, Inc.; Louis T. Condon, Continental Bag and Paper Company; Nathan Isen, Enterprise Paper Company; Charles Wilder, Wilder Brothers; President Norbert A. Considine, Paper House of Pennsylvania; Leon Beck, Beck Paper Company; David Lindsay, Lindsay Brothers; Morgan H. Thomas, Garrett-Buchanan Company; H. J. Hogg; Clark H. Morian, J. M. S. Ewing, Cherry River Paper Company; H. W. Mason, Dill and Collins Company; Harvey Hearl, Quaker City Paper Company; Leonard J. Raymond, Raymond and McNutt Company; A. B. Sherrill, James MacCracken, and Winfield Predmore, Reigel and Company; W. S. Wilcox and T. S. Furlong, Wilcox, Walter Furlong Company; Harry Donahue, Molten Paper Company and Allen E. Whiting of the Whiting-Patterson Company.

Daring Paper Co. Formed

Following the transfer of the Amboy Paper Company's plant into the hands of the new ownership the company has been reorganized as the Daring Paper Manufacturing Company with C. S. Daring as its President. The plant was closed down for over a month during the change in its business administration. The new company will conduct the mills of the Amboy Company located at Bridgeport, Pa., and devoted to the production of Bristol Boards, Chocolate layer boards and other paper compositions. More than 50 hands have been employed in the production of these specialties.

New Superintendent Appointed

Following the sudden death of Frank Milon, nationally known as one of the most prominent of mill superintendents, and for more than 30 years in charge of the plant of W. C. Hamilton and Sons Mills at Miquon near Philadelphia, his assistant, William J. Gaul, was last week appointed his successor. Superintendent Gaul has been associated with the Hamilton Mills for more than a score of years and received his training under the late Superintendent.

Garrett Paper Co. to Build

A new plant will be erected by the Garrett Paper Corporation, of Newtown Square, owners of the old Forrest Mills, for the purpose of entering into another line of paper converting. The new addition to the company's buildings will be erected in Westchester, Pa., and will be devoted to the manufacture of egg cartons. It is located along a railroad siding and will produce several carloads of cartons weekly.

Satterthwaite Paper Co. Adds Forces

Having been launched successfully on its career in the paper distribution field of the Quaker City several weeks ago the Satterthwaite Paper Company, 231 Chestnut street, has added to its personnel and the various lines of books, bonds and ledger papers which it will carry. Among the additions to the sales forces are Harry Dusaman and Theodore Taylor, formerly associate of the head of the firm Howard Satterthwaite during his long years of service with the Garrett-Buchanan Company. Among the lines which the company will represent are those of the Neenah Paper Company, Neenah, Wis.

Glassine Company Under New Ownership

Operation under the newly organized company which took over the control of the glassine plant of the Diamond State Fibre Company, at Conshohocken began with the opening days of the month. The Glassine plant and all its assets were acquired by the West Conshohocken Glassine Company, a newly formed company with former Superintendent of the plant, Chester E. Beecher as President. The working forces were curtailed under the new regime due to the removal of the horn fibre department which was removed entirely. Harry Halladay, councilman of Conshohocken, who was head of the mechanical department of the company under the former ownership has been retained by the Diamond State Fibre Company and transferred to another plant.

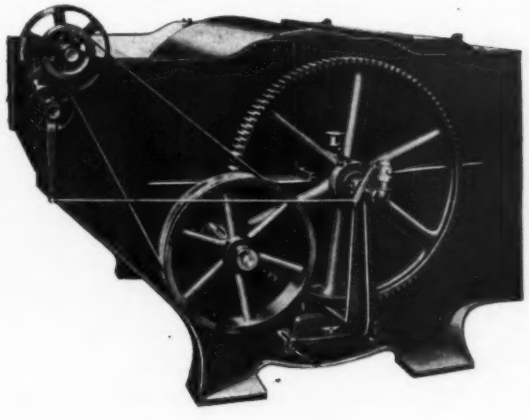
James Andrews, Inc., and Keystone Co. Consolidate

Through the consolidation of the firm of James Andrews, Inc., 1315 Cherry street with The Keystone Company, Drexel Build-

(Continued on page 64)

For Every Paper Mill

The BIRD SAVE-ALL



We'll admit there are mills that should not install Save-Alls.

But they usually are cotton mills or grain mills—they're certainly not paper mills.

For every paper mill that produces white water needs a Bird Save-All. It can't afford to be without one.

It saves money at a profit.

BIRD MACHINE COMPANY
South Walpole Massachusetts

7705

Western Representative
T. H. Savery, Jr., 1524 Republic Bldg.
Chicago, Ill.

BIRD MACHINERY

Canadian Builders of Bird Machinery
Canadian Ingersoll-Rand Co., Limited
260 St. James Street, Montreal, Canada

Paper Trade Views More Optimistic in Chicago

While Business Is Not Booming, Most Paper Merchants Report Trade Fair With the Outlook Good—Pilcher-Hamilton Salesmen Hold Regular Monthly Luncheon at the Union League Club, Thursday April 2—E. W. Mielke Begins New Duties as Vice-President of the Dwight Bros. Paper Co.

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, April 6, 1925.—Here and there we found a paper merchant who had to "carry on" at home, instead of being with the majority at the convention, and the comment of such on the situation here was rather optimistic. None could be found who would say that business is booming, but most of them say that trade is fair and that the outlook is good if—. The removal of that "if" hinges on the merchants getting a margin of profit that is in line with the relation between tonnage and expenses. In the fine division coated and machine finish books, and bonds are having the call. Dealers in this division say that the busy printers are those who specialize in book, house organ and direct mail work. The job printers are not so busy. In the coarse paper division business is fair to good.

Pilcher-Hamilton Salesmen Meet

The regular monthly meeting and luncheon of the Pilcher-Hamilton salesmen was held at the Union League Club, Thursday, April 2. The usual feature speeches were omitted at this meeting in order to give the salesmen an opportunity to indulge in a round table discussion of not only their own problems but anything else that pertained to the productive end of the business.

The boys had just finished a sixty day sales contest between two teams dubbed the policemen and firemen. The cops "brought home the bacon" and the gallant fire laddies got a "raspberry." The soup couldn't be heard for the alibis when the firemen had the floor, and the cops told how they did it, with all the quiet modesty of a Plymouth Rock rooster announcing that he had just ushered in a new day.

E. W. Mielke with Dwight Bros. Paper Co.

E. W. Mielke, the new vice-president of Dwight Brothers Paper Company, 626 South Clark street, was busy receiving good wishes from his friends in the trade the first few days at his new desk.

It is no news to the trade to say that Mr. Mielke is an old timer in the business. It may not be amiss, however, to say that he began his paper career in Portland, Oregon, in 1901. He came to Chicago in 1906 and joined the Paper Mills organization, with which he stayed until the first of this year. Disinterested parties say that both Dwight Brothers and E. W. are to be congratulated on the new affiliation.

Mr. Mielke is faithful plus to his business interests, but he does not neglect the social, religious or recreational side of life. He is a good churchman and is a member of the Masonic and Elk fraternities. He golfs, hunts, fishes and enjoys base ball.

W. J. Blackley Moves to Indianapolis

W. J. (Bill) Blackley has moved his home to Indianapolis, Indiana, where he is to be connected with the Beveridge Paper Company, manufacturers of blanks and specialties. Mr. Blackley has extensive mill experience, having been connected at times with the American Writing Paper Company and the Niagara Paper Company. He traveled all over the country for those mills and is very well known throughout the trade.

F. V. Robinson Going to Alaska

Fred V. Robinson, who has been with the Butler Paper Corporation for the past nine years is busy these days planning another jaunt to Alaska. He made three trips to that country last year and plans to make two trips this year. Mr. Robinson is one of the coming young men in the Butler organization and is granted leave of absence to make these trips, as they have their educational value to the paper man. To further increase his value to his firm, he is taking a special commercial course at Northwestern University.

Mr. Robinson found that the trip had a special appeal to paper men and had with him last year a number of prominent men in the industry. He expects to have quite a few with him this year. He says that if there are any paper men who would like to make a pleasure trip where they will see some real he-man country and at the same time get a first hand knowledge of virgin timber, he will be glad to have them get in touch with him. Dawson City is the Alaskan objective of the trip. The trip lasts about 35 days and $675.00 will cover all expenses. Mr. Robinson will leave Chicago June 20 on the first trip and the second will be started July 28.

The trips take in the Canadian Rockies, which furnish, as everybody knows, the finest scenery on this continent. The famous Lake Louise is visited on the way up. The inside passage is used in going from Vancouver to Skagway so that rough water never mars the pleasure. Land is touched once or twice a day and millions of feet of virgin timber are always in sight.

American Writing to Sell Ohio Properties

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., April 7, 1925.—Announcement was made yesterday by Sidney L. Willson, president and receiver of the American Writing Paper Company that steps were being taken to petition the Federal Court for permission to sell the properties of the company located in Ohio in order to liquidate the claims of the city of Holyoke against the company for back taxes. These taxes amount to $400,000 with about $200,000 additional brought by this year's tax levy.

Tax Collector James M. Kennedy and Atty. Eugene A. Lynch representing the city went to Boston today to see what steps could be taken to hasten the matter of getting the back taxes. It could not be learned tonigrt whether the city officials would join with the company in petitioning for the sale of the Ohio properties or not. The original plan of the officials was to take up court proceedings against the company but this may be sidetracked now the company proposes to sell off property and pay up.

Michigan Board & Paper Co. Formed

[FROM OUR REGULAR CORRESPONDENT]

MONROE, Mich., April 8, 1925.—A new company has been organized and incorporated in this city under the name of the Michigan Board and Paper Company.

The company is organized for the purpose of buying, selling and manufacturing paper box board and paper specialties.

The main office of the company is located in the Nickels building at the southwest corner of Monroe and Front streets.

The company is incorporated for $25,000, of which $16,000 has been paid in.

The officers of the company are: J. D. Miller, president; Sterling Dusseau, secretary and treasurer and Attorney George Wright, director.

Mr. Miller has had many years of practical experience in the paper manufacturing business and has been connected with some of the largest paper manufacturing companies in the United States.

BLEACHED and UNBLEACHED

SULPHITES

KRAFT PULPS

GROUND WOOD

NORRONA

PULP STONES

PERKINS-GOODWIN CO.

33 WEST 42nd STREET

NEW YORK

PAPER

PRINTING PAPER

of

EVERY DESCRIPTION

Demand For Paper In Toronto Shows Improvement

Gradual Betterment is Expected Now in All Lines to Continue Throughout the Spring—Resolutions Urges the Granting of Land to Duluth and Ontario Railway Contingent on Building of Pulp and Paper Mills—Plant of Glengarry Pulp Company Is Sold to T. A. Stiles.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., April 6, 1925.—Business in the paper line picked up considerably during the past week and more inquiries were received than for some time past. The first two or three weeks in March were very dull but the last one materially helped in rounding out a very good month. Fine weather, accompanied by a large Easter trade in several lines, brought some benefit to jobbers and printers were more active. From this out is believed there will be a constant, gradual improvement and distributors are talking more hopefully as the spring season advances. Prices remain firm and travelers are now covering all the small towns by automobile which, up to the present, owing to unsatisfactory state of the roads, could not well be reached. The paper mills are quite busy and export trade to the Antipodes is being looked after more vigorously than ever.

Railway Would Boom Paper Trade

A resolution has been passed by the Fort William and Port Arthur Boards of Trade urging upon the Ontario government the wisdom of granting to the builders of the Duluth and Ontario railway, 6,400 acres per mile, to be selected in alternate townships, or larger blocks within twenty miles of the railway, for a distance of 250 miles, the said grants not to embrace limits already applied for by existing mills; but on condition that the Duluth and Ontario Railway Company build a railway and secure the erection of additional pulp and paper mills in Fort William and Port Arthur or, in the immediate vicinity thereof, until the total local production shall be one thousand tons of news print per day, within a reasonable time, and as rapidly as the necessary power is made available by the Ontario Hydro-Electric Commission. The proposed railway would run northerly from the international boundary into the interior of the Albany river, which is about 600 miles long, and with it and other intersecting rivers, would render accessible to the timber and pulp wood operator and to the mining prospector, a large area of Crown lands, now practically inaccessible.

Bowlers Presented with Prizes

An enjoyable banquet was held at the King Edward hotel last week, which marked the closing of the bowling tournament in five pins of the various teams in the Toronto Carton Council. F. A. Fielder, of the Fielder Paper Box Company presided and addresses were delivered by A. Meredith of Meredith, Simmons Co., Don Porter of the Rudd Paper Box Company and A. J. Allen of Paper Sales. The winners were, first "The Hinges" under Capt. Jupp; second "The Rookies" under Capt. Oke, and third "The Ne'er Do Wells" under Capt. Hewitt. The first prize was a valuable silver cup donated by W. P. Bennett of the Rudd Paper Box Company, to be competed for annually. The members of the victorious team were given miniature replicas of the Bennett trophy by A. Meredith. R. S. Dunlop of the Dominion Paper Box Company presented prizes of silverware to the second team. The booby premium was presented to the "Shur-Shots" and Capt. Long suitably acknowledged the "gift." S. J. Frame, secretary of the Canadian Paper Box Manufacturers' Association, extended a welcome to the gathering and congratulations to the winning aggregations. Songs and humorous sketches filled in a very pleasant evening.

Ontario Has Greatest Aircraft Organization

Hon. James Lyons, Minister of Lands and Forests for the province of Ontario, in a recent address in the Ontario Legislature, said that Ontario has today the greatest aircraft organization in the world and referred to the success of the aerial patrol in forest fire prevention work. Although the tenders originally received for forest patrol flying had been about $95 an hour, the government had been able to do the work itself for less than $40 an hour. He added that the expenditures for forest fire protection had been reduced by $208,000 although hydroplanes and equipment had been purchased. During the past year, 595 incipient fires were detected. Referring to the pulp and paper situation, Mr. Lyons said that, by the end of 1925, Canada would be the largest producer of news print in the world and ninety per cent of the production went to the United States. He said that over 1,000,000 cords of pulpwood were exported annually to the United States and over 29 per cent of the raw pulp produced in the Dominion. He declared that if the full facts were known the agitation for an embargo would be much stronger.

Strongly Against an Embargo on Wood

M. E. Crouch, who is manager of the Porcupine Pulp and Lumber Company at Hoyle, Ont., states that his firm, which last year rossed 12,000 cords of pulpwood and shipped it to Niagara Falls, N. Y., bought this wood from the settlers employing Canadian labor and paying the prevailing prices. When the wood is rossed it is transported by the Canadian National Railways to Niagara Falls, at a carrying charge of about ten dollars a cord and is there converted into paper. Mr. Crouch adds that the greater part of the actual wages in connection with the handling of the product, from the tree to the paper, is spent in Canada. If an embargo is placed on the pulpwood, he declares that the Porcupine Company will go out of business, buy no wood from the settlers, shut down its rossing plant and stop its shipping on Canadian railways.

Glengarry Pulp Co. Plant Sold

The plant of the Glengarry Pulp Company, Cornwall, Ont., which has been in liquidation for the past year and has a capacity of about forty tons a day of ground wood pulp, was recently put up at auction by the courts. The property and mill was bought by George A. Stiles, representing Mary Jane Ross, one of the bondholders, for $24,000. The property is subject to one machinery lien of $600 and, as the liabilities of the company are about $80,000, there will be nothing for the unsecured creditors. The proceeds go to the bondholders, Mary Jane Ross and the Thompson and Heyland Lumber Company. Sale by tender was directed last summer but no bids were received.

Notes and Jottings of the Industry

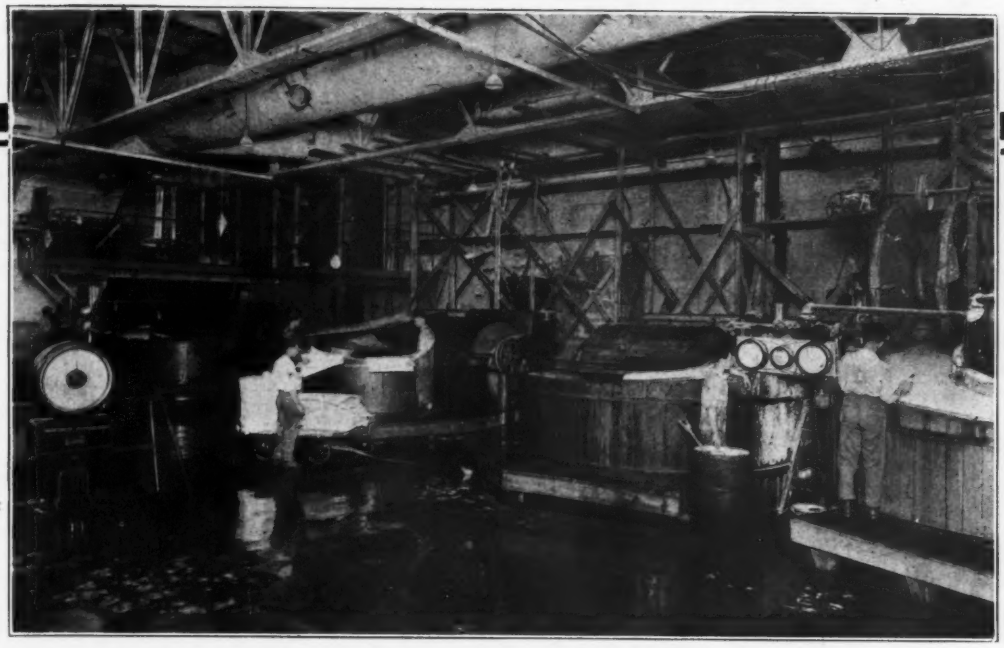
George R. Gray, manager of the woods department of the Spanish River Pulp and Paper Mills, Sault Ste. Marie, Ont., and Col. P. B. Wilson, vice president of the company, were in Toronto last week.

John Robb of the Dominion Engineering Works, Montreal, was in Toronto lately calling upon the paper trade.

Miss Vine, who has been a valued member of the staff of the Toronto office of the Spanish River Pulp and Paper Mills, was presented with a suitable present last week on the occasion of her forthcoming marriage.

J. B. McGregor, late with the Regal Paper Box Company, Toronto, has bought the City Paper Box Company, 64 Adelaide street East, and the plant is now being operated under the name of the McGregor Paper Box Co..

R. G. Dinsmore, of the Bethune Pulp and Lumber Company, Huntsville, who is Mayor of that progressive town, was in Ottawa last week heading a deputation asking for the erection for a new post office and customs house.



Four 2,000 lb. Niagara Beaters in Large Eastern Book Mill

How Niagaras Save Power

Furnish: Ground wood and bleached sulphite.
Power Installed: 100 H.P. for one 2,000 Niagara.
150 H.P. for two 2,000 Hollands.
Niagaras used 39 H.P. Hrs. per ton of stock produced.
Hollands used. 69 H.P. Hrs. per ton of stock produced.
Niagaras saved 43 per cent total power consumed.
Write for full information regarding this experience.

Book Paper—A Higher Quality at a Lower Cost

It is often said that paper is made in the beater. The importance of the beating process cannot be overemphasized and some of the largest book mills in the world are finding it possible to make better paper at a lower cost by installing the right kind of beater equipment.

By radically decreasing their power consumption, reducing their beating time, saving floor space, belting, motors and other equipment in their beater rooms, using fewer men and at the same time improving their product, these mills are cutting costs and making better book.

All this is made possible by Niagara Beaters. We have ready for you a booklet giving full particulars and proof regarding the above statements.

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Avenue

New York Trade Jottings

J. Fred Booth, managing director of J. R. Booth, Ltd., Ottawa, and Mrs. Booth were New York visitors last week.

* * *

Col. C. H. L. Jones, manager of the Spanish River Pulp and Paper Mills, Ltd. of Sault Ste. Marie, paid New York a visit last week.

* * *

R. A. McInnes, mill manager of the Abitibi Power and Paper Company, Ltd., Iroquois Falls, Ont., was a New York visitor last week.

* * *

President E. W. Backus of the Minnesota and Ontario Paper Company, International Falls, Minn., recently spent a few days in New York.

* * *

H. G. Craig & Co., Inc., of 52 Vanderbilt avenue, announces that it has succeeded to the partnership business heretofore conducted by H. G. Craig & Co.

* * *

A. P. Costigane of Toronto, secretary-engineer of the Ontario Pulp and Paper Makers' Safety Association, was in this city last week on business.

* * *

L. R. Wilson, managing director of the Abitibi Power and Paper Company, Ltd., Iroquois Falls, Ont., accompanied by Mrs. Wilson, spent several days here last week.

* * *

David L. Cohen, who founded the Manhattan Paper Company, Inc., is now doing business at 43 Greene street, under the name of the Hope Paper Company. The telephone number is Canal 3478.

* * *

The Salesmen's Association held its usual weekly luncheon at the Hotel Belmont on Monday. The attendance was very good but there was no special speaker and the time was spent in a general discussion of trade conditions.

* * *

The Board of Directors of the International Paper Company has declared a regular quarterly dividend of one and one-half per cent on the preferred capital stock, payable April 15 to preferred stockholders of record at the close of business April 7.

* * *

J. L. Fearing, manager of the Department of Sales of the International Paper Company, sailed last Saturdey morning on the *Homeric* for Europe where he will spend a month studying trade conditions there. He will visit Paris, London and other prominent cities.

Recent Trimbey Machine Installations

GLENS FALLS, N. Y., April 6, 1925.—Mr. Gastonguay, of the Trimbey Machine Works, sailed from New York on the "Aquitania" on January 3 and spent the months of January and February in England. He is now in France and will spend the latter part of March in Italy and Switzerland.

While in England he installed two Trimbey Consistency Regulators at the plant of Yates Duxbury & Sons, Ltd., Bury, and a Trimbey & Tibbitts Proportioning and Metering System at the Kemsley Mill of Edward Lloyd, Ltd., also two Consistency Regulators. This latter installation was made in record time. The apparatus in question did not leave New York until January 8 but was installed and placed in operation and a duplicate set of equipment ordered on March 2, only seven and one-half weeks after the first shipment left this country.

The Norman Engineering Company of London has been appointed agent for Great Britain, with various sub-agents working under them and with Mr. Gastonguay supervising the installations, and three Consistency Regulators have just been shipped to them. The second set of equipment for Lloyd will go forward next week.

In France, Messrs. Lorentzen and Gutzeit of Paris are agents and their territory includes Spain and Belgium. Eight Consistency Regulators were shipped them in February and Mr. Gastonguay is now assisting them with the installations. Four of these machines are being installed for the Papeterie de la Seine, at Nanterre.

A Proportioning and Metering System and three Consistency Regulators are now at the mill of the Cartiere Burgo, Verzuolo, Italy, ready to be put into operation in the near future.

The Trimbey Machine Works recently shipped a Proportioning and Metering System and two Consistency Regulators from the shop at St. Catharines, Ontario, for the new mill of the Eddy Company, Ltd., at Hull, Que.

At Glens Falls the company is now building the Seventh Proportioning and Metering System which the firm has furnished to the International Paper Company. This will go to their mill at Livermore Falls, Me., and be used on high class paper. The firm is also building a 300-ton Proportioning and Metering System for the East Millinocket Mill of the Great Northren Paper Company.

Orders have been received for Regulators and Metering System for the new mill of the Wayagamack News, Ltd., of Three Rivers, Que., and designs are being prepared for further installations in England, Switzerland and Sweden.

In addition to foreign shipments, Consistency Regulators have recently been shipped to the Allied Paper Mills, Crown Willamette Paper Company, Seaman Container Manufacturing Company, International Paper Company, Fort Edward Mill, and Peshtigo Paper Company.

The company has recently completed and shipped for George F. Shevlin of Glens Falls, three 8-inch C. I. Blow-off Valves for the Daily News Paper Corporation, North Tonawanda, N. Y.; two 6-inch Bronze Series "F" Valves for the Anglo-Newfoundland Development Company, Ltd.; one 6-inch Bronze Series "G" Valve for the Hammermill Paper Company; and six 2-inch Bronze Series "G" Valves for the Oxford Paper Company, Continental Bag and Paper Corporation and the Parker-Young Company.

Little Change in Boston Paper Market

[FROM OUR REGULAR CORRESPONDENT.]

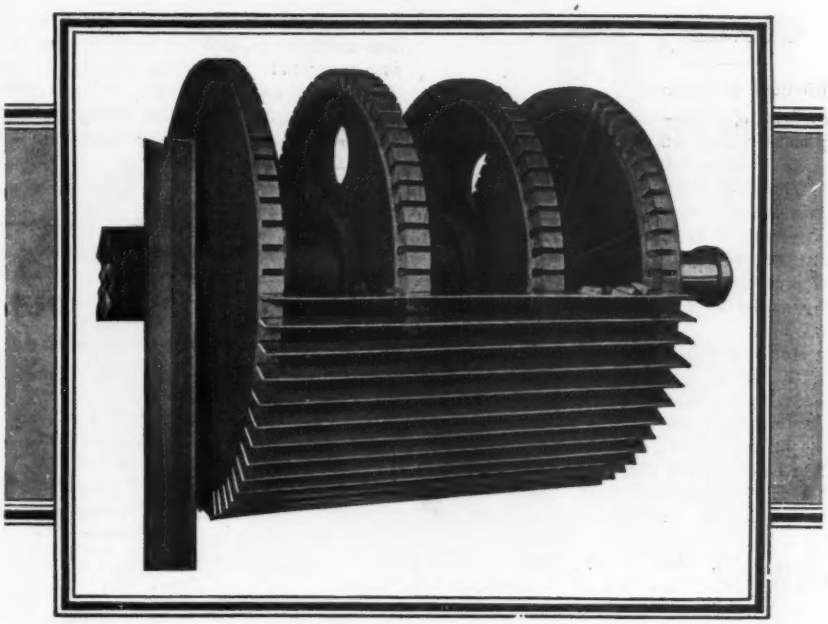
BOSTON, Mass., April 6, 1925.—There was very little change in the paper trade here this week, the improvement noticeable last week managing to hold its own during the last few days. It seems to be a permanent policy to take on stock only for immediate needs. This applies to all branches of the business. Some of the orders, however, are sizeable and queries are constantly coming into the offices for prices, grade information and weights.

Some local conditions in general business have improved and this is reflected in a few orders in special lines. The fine grades division is finding plenty of orders with the printers and stationers. There seems to be a steady demand for this particular kind of work, in fact it has been the one bright spot in the paper trade in the last few months.

There is a slightly better tone noticeable in the coarse paper market and a firming of all prices is felt. Shipments of Spring orders are causing a steady demand for wrappings. Business in the box board branch is picking up also with general Spring trade.

Wayagamack Lets Contract for New Machinery

MONTREAL, Que., April 7, 1925.—Contracts have been let by the Wayagamack Pulp and Paper Company, Ltd., to be placed in operation at Three Rivers. Ground wood mill machinery and news print machines will be installed by Charles Walmsley & Co., Ltd., of London, England.



A paper mill superintendent told us only last week that he had never seen one of our Bandless Rolls. Indeed he has never heard of a beater roll made without bands or rings to hold the fly bars. This seemed almost incredible to us, because we have built more than **seven hundred** (700) bandless beater rolls and they are in very general use on almost every kind of stock.

If, by any chance YOU are not familiar with our Bandless Rolls, please write us at once. Your rolls can undoubtedly be built into this bandless type.

"Your paper is made in your beaters"

SPECIFICATIONS

Four cast steel heads shrunk on and keyed to shaft.

Special alloy steel fly bars, heat treated. Bars held at four points by steel keys driven home.

No shims; perfect fits at all four points; no loose bars.

Bars easily and quickly removed without taking roll from bearings.

Fly bars always sharp edged; never burr over. Superior design and correct mechanical construction.

The simplest and strongest beater roll built. Your present rolls can be built over to this type.

Dilts

MACHINE WORKS, Inc. FULTON, N.Y.

EXPORT OFFICE ~15 PARK ROW~ NEW YORK CITY

Obituary

Richard S. Hoffman

BALDWINSVILLE, N. Y., April 6, 1925.—Richard S. Hoffman, aged 53, widely known manufacturer, died suddenly Monday morning of last week at his home, 46 Syracuse street, Baldwinsville.

Mr. Hoffman's death following a brief illness, comes only three months after that of his father, the late William H. Hoffman, pioneer oil man of Pennsylvania, who died last Dec. 7.

Richard Hoffman was born in Oil City, Pa., where his father was one of the first oil prospectors. The family lived there until 20 years ago, when they moved to Baldwinsville and surrounding territory.

As president of the Hoffman Paper Manufacturing Company, Richard Hoffman became one of the most successful business men in Central New York. He was also affiliated with the Masons and was well known in fraternal circles. Among his affiliations were: Callmacus Lodge, F. and A. M., Phoenix; Oswego River Lodge No. 270, R. A. M.; Lake Ontario, No. 32 Knights Templar; Oswego Consistory, 32d degree; Media Temple, Mystic Shrine, Watertown; Oswego Lodge, 271, B. P. O. E., and the Masonic Club of Baldwinsville.

Surviving are his widow, Mrs. Clara Cowan Hoffman, four sons, William H., Arthur H., Jack C. and Richard S. Hoffman; a daughter, Miss Harriet Ruth Hoffman; his mother, Mrs. Harriet Hoffman, and a sister, Mrs. L. H. Langdon, Syracuse.

Funeral services for Mr. Hoffman took place at the home Wednesday of last week at 2:30 p. m., with burial in Baldwinsville.

Zachary T. Hollingsworth

BOSTON, Mass., April 6, 1925.—After an illness of only several days the death occurred last night of Zachary Taylor Hollingsworth, who was widely-known in the paper trade as one of the large manufacturers. He had made his home at the Hotel Brunswick for the past three years.

Mr. Hollingsworth, whose death was briefly mentioned in the PAPER TRADE JOURNAL last week, was born in Milton, July 26, 1848, and his parents were Amor and Jane M. (Robinson) Hollingsworth. He was educated at Milton Academy and Chauncy Hall School, and he early went into the paper manufacturing business. He was president of the Hollingsworth & Vose Company. He first established himself in Walpole, where his mills were located for several years; he then took Mr. Vose into partnership in 1882 and the concern was incorporated in 1892.

He was a director of the American Glue Company, a member of the Boston Chamber of Commerce, the Club of Odd Volumes and the Massachusetts Historical Society; and his clubs were the Union, Exchange, Automobile, and the Grolier Club.

The surviving members of his family are two sons, Amor Hollingsworth of Milton and Valentine Hollingsworth of 191 Marlboro street, Boston. Mrs. Hollingsworth, who was Ida Hollingsworth of Wilmington, Del., has been dead a number of years.

British Paper Market Quiet

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 8, 1925.—The British paper market is characterized as being quiet in an unofficial report received by the Paper Division of the Department of Commerce.

The demand for news print is quite good, says the report, following the noticeable reduction in unemployment in the printing trade and the domestic mills there are well supplied with orders notwithstanding the extreme competition still experienced from the continental mills. The Esperado mills are also well employed, writings, printings, imitation art papers, tinted papers, pulpboards, and good class middlings are moving freely at reasonably profitable prices.

The domestic market for fine writings says the report, shows slow improvement, and the export market is unsatisfactory. Wrapping paper mills are finding difficulty in meeting the competition from foreign sources especially in kraft wrappings. Imports during January were larger than during the same month of last year. Exports also increased owing largely to a better demand from Australia.

Crocker-Wheeler Co. Changes

The Crocker-Wheeler Company, Ampere, N. J., has closed its Baltimore Office and has opened an office in Atlanta, Georgia—101 Marietta Building. This office is in charge of Geo. D. Anderson, Jr.

S. M. Conant, formerly in charge of the Baltimore Office, has been appointed assistant sales manager and is now located at Ampere, N. J.

On March 28 the Pittsburgh Office of the Crocker-Wheeler Company, in charge of J. R. Lewis, will move from the Henry W. Oliver Building, to the Dravo Building, 300 Pennsylvania avenue. This office will have a warehouse in which a stock of from 100 to 150 motors will be carried.

Good Winter for Pulpwood Cutting

The Thompson and Heyland Lumber Company, Toronto, will this season handle about one hundred thousand cords of pulpwood and since the first of the year they have shipped out about five hundred cords a day to mills in Ontario and across the border, supplying the Mattagami Pulp and Paper Company at Smooth Rock Falls with twenty thousand cords, which have been delivered. Owing to easy labor conditions and splendid operating weather in the bush more wood has been delivered out to the railway tracks this season than usual. The company have several portable rossing plants operating along the Canadian National Railway.

M. O. Wood Resigns as Manager at Piercefield

PIERCEFIELD, N. Y., April 6, 1925.—After completing nearly 25 years of service with the International Paper Company, the last 12 years as manager of its plant at Piercefield, M. O. Wood has resigned his position to take effect April fourth. The latter part of April Mr. and Mrs. Wood will remove to their home at Herkimer, N. Y., for a well earned vacation before considering any further business connection. The vacancy caused by the resignation of Manager Wood has not as yet been filled.

Oxford Paper Co. to Build Warehouse

[FROM OUR REGULAR CORRESPONDENT.]

RUMFORD, Me., April 6, 1925.—Early in April the Oxford Paper Company will start construction of a three-story brick and steel storage warehouse. The building will be 182 by 35 feet to be located at a point between the plants of the Oxford Paper Company and will be used as a storage house for the finished products of both concerns, and as a rail shipment depot. Traveling cranes together with all modern appliances to hasten quick handling of the shipments will be installed.

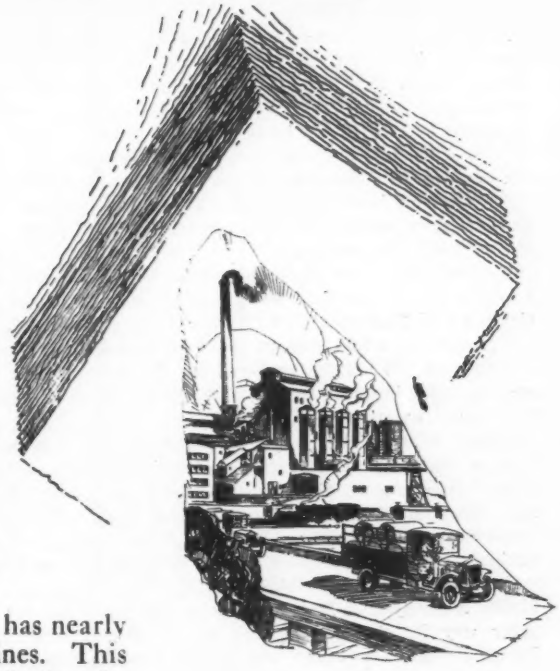
Glossary of Paper Terms for Exporters

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 8, 1925.—The Paper Division of the Department of Commerce has just completed and is now sending to the printer a glossary of paper terms and instructions to exporters for guidance in properly listing and classifying exports of papre on shippers' export declarations. Insofar as can be learned here this is the first time that any such tabulation has been made and it should be of very considerable value to the Paper Industry.

The NEW BELOIT Shake

Produces a better formed sheet at a higher speed.



The new "Beloit" Fourdrinier and Shake has been designed, perfected and patented for the purpose of producing a better formed sheet at a higher speed, to accomplish on a wide, high-speed machine what a narrow, slow-running machine has heretofore done. Its application in tissue, kraft and other paper mills shows that it is accomplishing this with ease. It has demonstrated money, time and labor-saving qualities that have opened the eyes of mill men the country over.

Its application in one mill alone showed an increase of 15% in production within a few days after its installation. Sixteen orders, including four re-orders prove that it is "delivering the goods."

On a 160-inch wire, 75 feet long, the "Beloit" Shake has nearly five tons less to vibrate than on the old type of machines. This makes possible the "jolt" so necessary in properly interlacing the fibres in the making of fine papers.

The New "Beloit," with its three features: *adjustable* as to pitch, *removable,* for changing wires and *shakeable* for the interlacing of fibres at increased speeds, is solving the problem of lowering costs and increasing production by superior *efficiency.*

Send for Bulletin No. 9 for further facts.

Beloit Iron Works — **Established** — BELOIT IRON WORKS BELOIT WIS. — **Since 1858** — **Beloit, Wis., U. S. A.**

CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Brokaw, Wis.—The Wausau Paper Mills Company, Brokaw, has plans under way for the construction of a new two-story and basement mill on local site, to be 80 x 135 ft., brick and reinforced-concrete, reported to cost in excess of $100,000, with equipment. L. A. De Cuerre, Wood Building, Wisconsin Rapids, Mich., is architect and engineer. C. A. Edmunds is general manager.

Philadelphia, Pa.—David Weber & Co., Fifth and Locust streets, manufacturers of paper boxes, containers, etc., has plans in progress and will ask bids before the close of the month for the erection of its proposed new plant on property at Richmond and Tioga streets, recently acquired. It will be three-Battery street, San Francisco, Cal., is reported to have selected estimated to cost in excess of $125,000, with machinery. The company has leased its present factory to the United States Rubber Company, and will remove equipment from his plant to the new works, supplementing with considerable additional machinery for increased output. The Ballinger Company, Twelfth and Chestnut streets, is architect for the new plant. David Weber heads the company.

Oakland, Cal.—The McKee-Greenwood Sales Book Company, Spokane, Wash., has awarded a general contract to the Austin Company of California, 214 Kearny street, San Francisco, for the erection of a local branch plant on Livingston street, near King street. It will be equipped for the production of paper specialties for business service, and will be one-story, estimated to cost approximately $45,000.

Camas, Wash.—The Crown Willamette Paper Company, 248 Battery street, San Francisco, Cal., is reported to have selected a local site along the Columbia River, for the construction of a new plant for the manufacture of paper bags and containers, consisting of several units, with power house, machine shop and auxiliary structures, estimated to cost $800,000, with machinery.

Chicago, Ill.—The Kellogg Box Board Company, care of Moore & Neely, 219 East Superior street, engineers, has plans under way for the erection of a new local mill at 2555 West Taylor street. The works will include a power house, and are estimated to cost close to $150,000, including machinery. It is said that bids will be called at an early date.

Sumner, Wash.—The Northern Board and Paper Company is planning for extensions and improvements in its local mill, including the installation of additional machinery, traveling crane, etc. It is expected to proceed with the work at an early date.

Kalamazoo, Mich.—The Bryant Paper Company has awarded a general contract to Ray D. Boyer, Press Building, for the remodeling of a portion of its mill on Alcott street, to provide facilities for increased output. It is understood that the improvements will be carried out at once. Felix Pagenstecker is president.

Philadelphia, Pa.—Fire, March 27, damaged a portion of the plant of the Philadelphia Paper Company, Upper Manayunk section. The loss will be replaced at an early date. The estimated amount of damage has not been announced.

Rumford, Me.—The Oxford Paper Company has completed plans and will soon again the erection of a new addition to its plant, comprising a three-story building, 35 x 183 ft., to be equipped primarily as a storage and distributing plant. An electric traveling crane and other material-handling machinery will be installed.

Williamsport, Pa.—The Williamsport Paper Box Company is said to have tentative plans under consideration for the rebuilding of the portion of its two-story plant destroyed by fire, March 29, with loss estimated at close to $100,000, including equipment. The reconstruction will cost approximately a like amount.

Millburn, N. J.—The former local plant of the Diamond Paper Company has been acquired by the Millburn Manufacturing Company, and will be used in the future for another character of manufacture.

Syracuse, N. Y.—The Single Paper Company, South Clinton street, has plans in preparation for the erection of a new three-story building on West Jefferson street, to be equipped for storage and distributing service. Gordon Wright, City Bank Building, is architect. John Single heads the company.

San Francisoc, Cal.—Fire, March 24, destroyed a portion of the plant of the Zellerbach Paper Company, comprising the main local storage and distributing division, with loss estimated at close to $150,000, including equipment and stock. It is purposed to rebuild in the near future.

Indianapolis, Ind.—The Capitol Paper Company has filed plans for improvements in its building at 225 West South street.

West Conshohocken, Pa.—The Glassine Paper Company, recently formed to take over the local mill of the Diamond State Fibre Company, is converting the plant for the production of glassine and greaseproof papers; all equipment heretofore used for the horn fibre department has been removed, and this space will be given over to general production. It is expected to proceed with operations at an early date, giving employment to about 100 men. Laurence C. Glass is secretary and treasurer.

St. Joseph D'Alma, Que.—Price Brothers, Ltd., Montreal, Que., is awarding contracts for work in connection with its local paper mill, consisting of a number of buildings, estimated to cost $2,000,000, with machinery. A general contract has been let to William I. Bishop, Ltd., Montreal, while an award for millwork, etc., has been given to Daigle & Paul, Ltd., Verdun, Que. Equipment contracts will also be given out at an early date, and in this connection the Waterous Engine Works, Company, Ltd., Brantford, Ont., has taken an order for a number of pulp wood grinders, caterpillar type.

Three Rivers, Que.—The St. Lawrence Paper Mills, Ltd., is

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perfecting plans for enlargements in its mill to double, approximately, the present capacity. Two new paper-making machines will be installed and considerable accessory equipment. Work on the new buildings will be placed under way in the near future.

New Companies

New York, N. Y.—The Eli Paper Company has been incorporated with a capital of $20,000, to manufacture and deal in paper goods. The incorporators are D. Stepp, L. S. Ingman and L. Harrison. The company is represented by M. and S. Myers, Forty-second street and Broadway, New York, attorneys.

Boston, Mass.—The Georgia Pulp Company has been incorporated with a capital of 1,000 shares of stock, no par value, to manufacture pulp products for paper mill service. Edward H. Osgood is president, and Thomas Gorham, 44 State street, Boston, treasurer and representative.

New York, N. Y.—Steffen, Jones & Co., Inc., has been incorporated with a capital of $25,000, to manufacture and deal in paper products, labels, etc. The incorporators are E. and E. W. Steffens and A. A. Schreiber. The company is represented by Brodek & Raphael, 67 Wall street, New York.

Haverford, Pa.—The Schuylkill Paper Company, care of the United States Corporation Company, Pennsylvania Building, Philadelphia, representative, has been incorporated under Delaware laws with a capital of $150,000, to manufacture paper products. The incorporators are George G. Meade, Ambler, Pa., and I. Raisch, Philadelphia.

Hoboken, N. J.—Peter Cardinale & Son, Inc., has been incorporated with a capital of $125,000, to manufacture paper products. The incorporators are James G. and Frank J. Cardinale, and Joseph De Palma. The company is represented by Fallon & Fallon, 51 Newark street, Hoboken.

Protest Duty on Imitation Parchment

WASHINGTON, D. C., April 8, 1925.—Paper importers are protesting to the Customs Service of the Treasury Department it is understood, in regard to the present application of the duty on imitation parchment paper. As a result of these protests it is said that a further investigation of the matter is to be made but before anything definite is done domestic paper manufacturers will be given an opportunity to be heard if they desire.

It was held some months ago that imitation parchment paper used by butchers, delicatessen dealers, etc., was properly dutiable under paragrauh 1305 of the Tariff Act of 1922 at the rate of 3 cents per pound and 15 per cent ad valorem. Collectors it is said have been classing many kinds of wrapping paper as imitation parchment and complaints have been particularly vigorous as regards MG sulphite paper which the importers claim is not imitation parchment paper at all and is properly dutiable under paragraph 1309 at 30 per cent ad valorem. There seems to be a feeling among some of the officials of the Customs Service that while the decision should not be changed the application of the decision may have to undergo some changes.

Letter from Secretary Moss

In connection with this case the letter which was written by Assistant Secretary of the Treasury Moss in July last year to the Collector of Customs in New York is of particular interest. The letter follows:

"The department refers to your letter of the 11th ultimo transmitting a communication from the appraiser at your port, dated May 17, in regard to the classification of wrapping paper which, the appraiser states, resembles parchment in appearance and which is used by butchers, delicatessen dealers, and others for wrapping meat and other greasy foods. The appraiser states that the paper is composed either entirely of sulphite pulp or sulphite pulp with an admixture of mechanical wood pulp, and that the stock is subjected to an unusual or extended process of beating in the course of manufacture which renders the paper grease and water resistant to a limited extent.

"It appears from the appraiser's letter that hearings were held in his office in regard to the proper classification of this paper at which importers and domestic manufacturers appeared and presented their views upon the subject. It further appears from the apraiser's letter that it is the present practice to advisorily classify this wrapping paper at the rate of 30 per cent ad valorem under paragrapn 1309, as the terms 'grease proof' and 'imitation parchment' in paragraph 1305 were considered by his office to be synonymous terms, and that paper which was not grease proof was not properly subject to classification as imitation parchment paper.

"The department notes from a persual of the stenographic report of the hearing, inclosed with your letter, that the importers contend that the words 'grease proof' and 'imitation parchment' paper are synonymous, and that no paper which is not grease proof is subject to duty as imitation parchment paper.

"The department has given this matter careful consideration, but is unable to concur in the position taken by the importers that the terms above quoted should be construed as applying to the same kind of paper. If Congress had intended that the quoted terms should be construed as synonymous, it would seem that the disjunctive conjunction 'of' would have been used instead of the conjunction 'and,' so that the provision would have appeared in the paragraph as 'grease proof' or 'imitation parchment' paper.

"If the contention of the importers is correct, there would appear to be no good purpose served by providing for imitation parchment paper at the same rate as on grease-proof paper, as the provision for grease-proof paper would cover all imitation parchment paper which is grease proof.

"In view of the foregoing, the department is of the opinion that Congress in providing for imitation parchment paper intended to provide for a paper resembling in appearance and in some of its qualities parchment paper, but a paper not necessarily grease proof, and this view seems to be supported by the Court of United States Customs Appeals in T. D. 33221 covering certain supercalendered, grease-proof paper known as glassine or parchmyn paper which was intended for use in wrapping greasy substances.

"The court in discussing the testimony taken before the board stated that the evidence disclosed that the paper imitated true parchment paper in appearance and use, and possessed, although in lesser measure, certain of its characteristic qualities, and the court in expressing its approval of the board's decision stated that the board's decision seemed to be well supported by the testimony, and that while it was true that the importation was not exactly like parchment paper and did not fully possess all of its valuable qualities, it nevertheless was enough like parchment paper to be called an imitation thereof and apparently was designed by the manufacturer to go into use as an imitation of the original and genuine parchment paper.

"Referring to the contention of the importers that paper, unless it is grease proof, is not properly dutiable as imitation parchment paper, I deem it pertinent to quote a part of the court's decision above cited:

" 'The importers, however, lay particular emphasis upon the fact that the importation is not entirely grease proof, which they claim is always the case with true parchment paper. But on the other hand, the article is partially grease proof, and this quality is one which gives it a substantial part of its value.'

"Following the reasoning of the court in the above-cited decision, the department is of the opinion that paper of the character described by the appraiser in his letter of May 17 is properly dutiable as imitation parchment paper under paragraph 1305 of the tariff act at the rate of 3 cents per pound and 15 per cent ad valorem. You will be governed accordingly as to merchandise of the character described, imported or withdrawn from customs custody 30 days after the date hereof."

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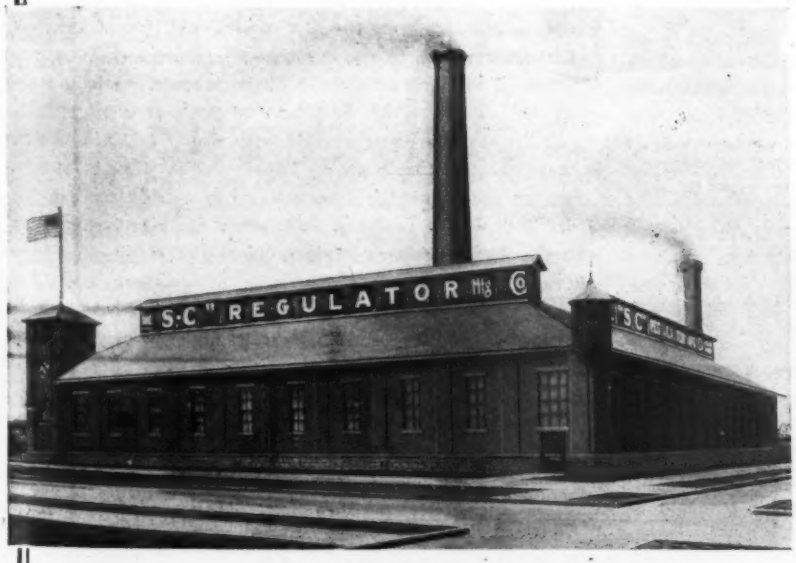

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The Magazine of the Paper Industry
HENRY J. BERGER, Editor

Member A. B. C. Audit Bureau of Circulations

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PAPER TRADE JOURNAL IN NEW CHICAGO OFFICE

The Western office of the PAPER TRADE JOURNAL will be removed May 1 to room 14, suite 410, 123 West Madison street, Chicago. H. K. Vinton, Western manager continues in charge.

A NOTABLE CONVENTION

While the convention of the National Paper Trade Association is now a matter of history, there was much that transpired during its deliberations which is worthy of comment. It was not only a successful convention but it was a notable one,—one that leaves the Association on a stronger footing than ever, one that was rich in its accomplishment and one which provided ample inspiration for future thought on the part of those who were present.

The PAPER TRADE JOURNAL congratulates the Association on its decision to hold the next annual convention in close conjunction with that of the American Paper and Pulp Association. We have expressed no opinion on this matter heretofore but we have inclined to teh belief that the advantages of holding these conventions at the same time more than offset any disadvantages which may be incurred. It seems to us that there are some who place too wide a gulf between the two associations. They have much in common, they both feel a kindred effect of trade conditions, they have practically the same problems to solve, the same difficulties to overcome and the same benefits to achieve.

For that reason it seems wise to hold the two conventions at the same time so that the members of each association may meet their brothers of the kindred association, confer as to experiences, exchange ideas and make suggestions. Added to this is the advantage of a closer fellowship and the development of the social side which is so important even in the cold-blooded world of business.

There are probably some who do not yet agree with this idea and, perhaps, there may be those who will never come to our way of thinking and yet we are inclined to believe that even they in time will come to realize that two bodies so closely allied should follow every policy possible that will draw them closer together and oppose every policy which it is possible to oppose which would have a tendency to drive them apart.

Secretary William C. Ridgway is entitled to a large share of credit, not only for the success of the convention but for a year of profitable activity. The association did not find itself face to face with a formal convention that had a blank year to talk about since its last convention. The year had been crowded with notable effort and worthwhile undertakings and, while most of the members were acquainted with these in a superficial way, it was only at the convention that they gained a detailed knowledge of what had been done. Mr. Ridgway is a capable secretary and he has, perhaps, never showed it more conclusively than during the past year.

In many ways his annual report was a masterpiece. It was not a mere collection of words but a presentment of essentials which told the story in a nutshell. His comments on trade conditions, his presentation of the subject of profits and his summary of what may be reasonably expected of the future showed a thorough conception of the real trade conditions at the present time.

The election of officers which was the last business to be transacted by the convention resulted in a happy selection of men who are especially well qualified to conduct the destinies of the association during the next year. J. A. Carpenter of the Kansas City Paper House, Kansas City, Mo., the new president, has been prominent for years in the affairs of the association and the caliber of the officers who will assist him in his year's work assures the association of a competent administration.

Vice-President Miller's report at the meeting of the Fine Paper Division was one of optimism. Regarding the past year and the outlook for this year he said:—

"On the whole, we have apparently prospered as well as other similar lines of business. The tonnage distributed has been nearly as large as in our peak years, but necessarily the tremendous growth in costs all along the line, coupled with one of the most highly competitive periods in our history, has not made it easy to keep out of red figures. On the whole, however, we have prospered, and the outlook for the balance of this year is bright."

Vice-President Carpenter struck a very similar note of optimism at the meeting of the Wrapping Paper Division when he said:—

"One of the things that I want to say in opening this meeting is that I think that last year, 1924, was a fairly prosperous year with the paper merchants. I know of a good many other lines that were not as prosperous. I realize that we have had years when we made more money than we did in 1924 but I don't think that there were many of the merchants who had very much to complain of last year."

One of the most interesting papers presented during the convention was that presented before the Wrapping Paper Division by Vice-President C. R. McMillen of the Union Bag and Paper Corporation. He told the story of the bag business in a striking way, touching on many phases which were new to many who heard him.

At the close of four days of solid, uninterrupted business, the convention sought relaxation on Thursday night at their annual banquet. It proved a delightful event and brought to a close a gathering that could not have failed to bring some benefit to each and everyone who participated in it.

Paper Mill Employment for February

February employment figures in the paper and pulp industry just made public by the Bureau of Labor Statistics of the Department of Labor rather unexpectedly show an increase for the month.

Two hundred and five paper and pulp mills reported their employment in January at 53,414 increasing slightly in February to 54,418 an increase of 1.9 per cent. The payrolls in these plants also increased from $1,423,333 in January to $1,455,757 in February an increase of 2.3 per cent.

Reports were received by the Bureau from 150 paper box factories which gave their employment in January at 16,321, increasing in February to 16,550 an increase of 1.4 per cent. The payrolls in these plants, on the other hand, decreased from $349,029 in January to $346,459 in February a decrease of 0.7 per cent.

The Bureau received reports from 143 paper and pulp mills which gave their employment in February of last year at 44,495, increasing in the same month of this year to 45,054 an increase of 1.3 per cent. The payrolls in these plants also increased from $1,187,221 in February of last year to $1,204,009 in the same month of this year an increase of 1.4 per cent.

One hundred and forty two paper box plants reported their employment in February of last year at 14,965, decreasing slightly in the same month of this year to 14,872 a decrease of 0.6 per cent. The payrolls in these plants also decreased from $310,169 in February of last year to $306,916 in the same month of this year, a decrease of 1 per cent.

Pettebone-Cataract Paper Co. Sold

NIAGARA FALLS, N. Y., April 6, 1925.—The plants of the Pettebone Cataract Paper company and of the Cataract City Milling company have been sold by Mrs. J. T. Jones, president and chief stockholder of both companies, located on the hydraulic basin in the lower milling district to the Niagara, Lockport & Ontario company, in conjunction with the Niagara Falls Power company. No changes in the operations of the two manufacturing plants and no changes in the personnel of the operating are contemplated, but the substitution of electric power for manufacturing operations will be made.

The acquisition of these properties will enable the Niagara Falls Power company to prevent the flowing of discharge waters and seepage over the high bank, a situation which has been criticized as marring the beauties of the lower gorge.

The acquisition of these properties will also enable the purchasers to use the water heretofore drawn by the two manufacturing companies in a more efficient manner, with a consequent increase in power output.

The Pettebone Paper Mill was built on the Hydraulic Basin in 1884 at the time New York State took over the private lands at Niagara Falls for State Park purposes. Prior to this time a pulp mill was built in 1880 by the Cataract Manufacturing Company, and along in those years sulphite and ground wood were replacing straw and rags in printing paper.

In the year 1892 the pulp mill and paper mill consolidated under the name of the Pettebone-Cataract Paper Company, the late Charles B. Gaskill being at that time president and chief owner of the company. In 1896 the property came into the possession of the late Captain J. T. Jones of Buffalo. Now the property is disposed of by his widow.

N. J. Bowker originally came with the company as an Accountant and for years has been General Manager and Treasurer.

Dr. Baker Addresses Kiwanis Club

"If New York State would probably utilize its idle empire of potential forest land, it would be possible to produce sufficient revenue to warrant an appreciable reduction in the taxes of citizens of this state," said Dr. Hugh P. Baker, executive secretary of the American Paper and Pulp Association before the New York Kiwanis Club at its meeting this week.

"This can not be done in a year," he added, "but we have in New York the possibility of producing great and sustained revenue from our forest land as well as providing within the state the raw material which is now brought into New York from distant portions of the country, and thereby not only utilizing our idle lands but also cutting the cost of the wood we now require for construction and the wood using industries.

"New York State general property taxes have risen from $214,000,000 in 1912 to $1,422,000,000 in 1922. State expenditures have almost tripled in that period. Over against this increasing tax and cost of state government we have an empire of relatively unproductive and idle land in our own state. Out of 30,000,000 acres of land in New York State, less than 15,000,000 acres are reported under the plow. Forest land in New York State is capable of producing better forests than are grown anywhere in Europe today. This state now imports 85 per cent of its lumber and wood.

"We have today in New York 1,500,000 acres of virgin timber, 3,166,000 acres in merchantable second growth timber, 5,690,000 acres in small second growth and 1,800,000 acres of land not restocking at all. In view of increasing taxes and increasing cost of government it is criminal waste to allow an empire of idle land to remain unproductive.

"The state should establish a definite forest policy along the lines of the national McNary-Clarke Forest Law. It should so manage its forest land as to make it continuously productive and stop forest fires. Other things may be done, and should be done, but these are among the points especially worthy of consideration."

Secretary Hoover on Stream Pollution

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 8, 1925.—Secretary of Commerce Hoover discussing recently the failure of the last session of Congress to pass the Wilson stream pollution bill, said that in his opinion before any law is passed prohibiting such violation, a survey of the extent and effect of the pollution of the streams is imperative.

Salvation of some streams would be impossible, except at fabulous cost and such a step would not be necessary nor desirable as it might bring great hardships to some industries and localities. These are probably few in number but demonstrate that an investigation of the actual situation is necessary before legislative action is taken. The secretary believes, he stated, that the forthcoming Session of Congress should appropriate sufficient funds to permit of such an investigation.

Albemarle Paper Mfg. Co. Improvements

[FROM OUR REGULAR CORRESPONDENT]

RICHMOND, Va., April 6, 1925.—The Albemarle Paper Manufacturing Company will start work soon on a steel and concrete addition to its plant to cost about $100,000. The new building will be used as a warehouse and as new quarters for its enamel blotting department and will also house one of its small paper machines to be moved from the Brown Island mill to the Hollywood mill.

We are also having built a large paper machine with capacity of between 45 to 50 tons per day to be installed in the Brown's Island mill in place of the small machine which is being moved. In the Brown's Island plant, the company manufactures Kraft wrapping.

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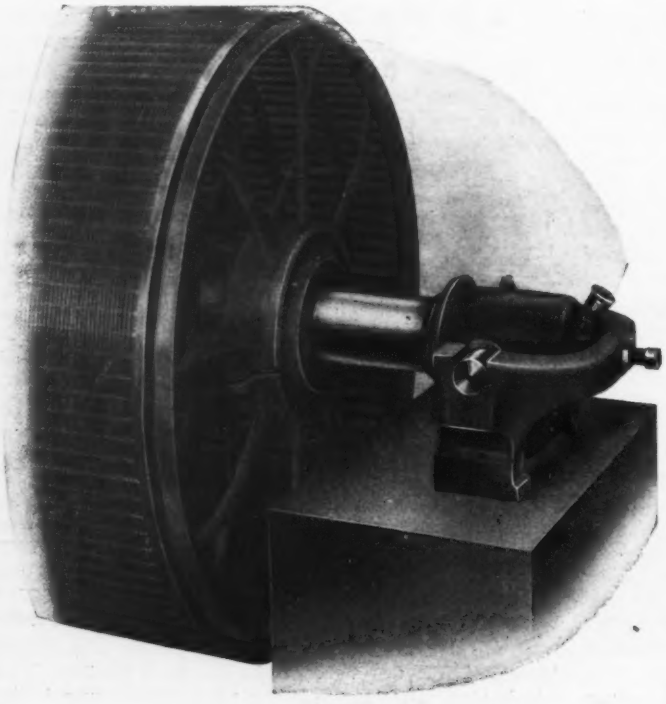

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Conducted by W.G.MacNAUGHTON, Secretary

Paperboard and Its Manufacture—VII

Multi-Cylinder Bristols, Including Translucents, as Menu Board, Ivory Board and Translucent Bristols

By A. O. Bragg

[*Continued from PAPER, January 8, 1925*]

Bristols.[1] (Multi-Cylinder)

These boards are sold on the basis of 100 sheets; the regular size, 22½ x 28½; the regular weights are as follows:

2-ply, caliper .011, approximate weight, 22½x28½, 500 sheets, 90 lb.
3-ply, caliper .016, approximate weight, 22½x28½, 500 sheets, 120 lb.
4-ply, caliper .022, approximate weight, 22½x28½, 500 sheets, 140 lb.

They are occasionally made thicker than 4-ply. The basis of weight is approximately 13 pounds to the point, 24 x 36.

Bristols are sealed 100 sheets to a package and wrapped 5 packages to a bundle. Solid-colored Bristols are also furnished in all widths, sheets or rolls, for roll tickets, checks, coupons, etc. Odd sizes and odd weights of all Bristols are made in quantity at a slight advance in price.

Bristols ordered in odd sizes or odd weights are frequently sold on the caliper specification instead of plies. Thus .011, .012 and .013 Translucents are common.

Index Bristols.[2] (Fourdrinier)

These are also sold on the basis of 100 sheets, and on weight instead of caliper.

Plain Blanks, Thick China, Tough Check, Colored Railroad Ticket[3]

These grades are all sold on the basis of 22 x 28 as the regular size, and 100 sheets to the package.

Tough Check and Colored Railroad Ticket range in thickness from 3 ply to 8 ply; Plain Blanks are thicker, running from 10 ply to about 16 ply.

Table of Try Scale Weights and Numbers for Ascertaining Weights and Numbers of Roll Board

The following table shows the scale weight of a ream of 480 sheets, 13 x 19, and its equivalent in Regular Number of Paper Box Board, with fractions to one decimal.

To test the weight of board: Cut a sample sheet 13 x 19, or one fourth the area of a regular sheet 26 x 38 (former regular size). Weigh the sample on a paper try scale to get the weight of a ream of 13 x 19—480 sheets. Having the weight of a ream, refer to the table to find the equivalent or Regular Number of the board.

Weight of ream of 480 sheets 13x19 Pounds	Regular number basis 26x38, 50 lb. Number	Regular number basis 25 x 40, 50 lb. Number
46	130.4	129.0
46.5	129.0	127.6
47	127.6	126.3
47.5	126.3	125.0
48	125.0	123.7
48.5	123.7	122.5
49	122.5	121.2
49.5	121.2	120.0
50	120.0	118.8
50.5	118.8	117.6
51	117.6	116.5
51.5	116.5	115.4
52	115.4	114.3
52.5	114.3	113.2
53	113.2	112.1
53.5	112.1	111.1
54	111.1	110.1
54.5	110.1	109.1
55	109.1	108.1
55.5	108.1	107.1
56	107.1	106.2
56.5	106.2	105.3
57	105.3	104.3
57.5	104.3	103.4
58	103.4	102.6
58.5	102.6	101.6
59	101.6	100.8
59.5	100.8	100.0
60	100.0	99.2
60. 5	99.2	98.4
61	98.4	97.6
61.5	97.6	96.8
62	96.8	96.0
62.5	96.0	95.2
63	95.2	94.5
63.5	94.5	93.7
64	93.7	93.0
64.5	93.0	92.3
65	92.3	91.6
65.5	91.6	90.9
66	90.9	90.2
66.5	90.2	89.5
67	89.5	88.9
67.5	88.9	88.2
68	88.2	87.6
68.5	87.6	86.9
69	86.9	86.3
69.5	86.3	85.7
70	85.7	85.1
70.5	85.1	84.5
71	84.5	83.9
71.5	83.9	83.3
72	83.3	82.8
72.5	82.8	82.2
73	82.3	81.6

[1] *See* "Paper," September 18, 1924.
[2] *See* "Paper," September 18, 1924.
[3] *See* "Paper," September 18, 1924.

Weight of ream of 480 sheets 13x19 Pounds	Regular number basis 26x38, 50 lb. Number	Regular number basis 25 x 40, 50 lb. Number
73.5	81.6	81.1
74	81.1	80.5
74.5	80.5	80.0
75	80.0	79.5
75.5	79.5	78.9
76	78.9	78.4
76.5	78.4	77.8
77	77.8	77.4
77.5	77.4	76.9
78	76.9	76.4
78.5	76.4	75.9
79	75.9	75.5
79.5	75.5	75.0
80	75.0	74.5
80.5	74.5	74.1
81	74.1	73.6
81.5	73.6	73.2
82	73.2	72.7
82.5	72.7	72.3
83	72.3	71.8
83.5	71.8	71.4
84	71.4	71.0
84.5	71.0	70.6
85	70.6	70.2
85.5	70.2	69.8
86	69.8	69.4
86.5	69.4	69.0
87	69.0	68.6
87.5	68.6	68.2
88	68.2	67.8
88.5	67.8	67.4
89	67.4	67.0
89.5	67.0	66.7
90	66.7	66.3
90.5	66.3	65.9
91	65.9	65.6
91.5	65.6	65.2
92	65.2	64.9
92.5	64.9	64.5
93	64.5	64.2
93.5	64.2	63.9
94	63.9	63.4
94.5	63.4	63.0
95	63.0	62.5
96	62.5	61.9
100	59.4	59.4

Board Gage

There is a celluloid gage, made by the C. L. LaBoiteaux Company, Cincinnati, boxboard distributors, for determining the Count and Regular Number of boxboard which will quickly and accurately give the information desired.

It has a fixed and a movable part like a slide rule. To find the Regular Number or Count, the width and length of sheet are set in Column A. The Regular Number is then found in Column B and the Count appears directly opposite the Regular Number.

Additional Data and Standards for the Purchase of Test and Container Boards

A. Test Liner Requirements.

Grades	Caliper	Test	Weight per M square feet, lb.
Standard	.016	85	70
Test	.016	100	70
Liners	.016	110	70
	.018	85	78
	.018	100	78
Sized	.018	110	78
Colored test	.016	75	70
Liners, sized	.018	75	78
Colored low-test	.016	65	70
Tinted	.018	65	78

Note. In order to distinguish 65 Number Test, the liner to be made light blue to distinguish the grade from Standard Test Liners used on cases to pass inspection of Interstate Commerce Commission.

B. Combined Container Boards.

The bases on combined boards will be on Double Jute Container. It is of three or more plies, sized on one side, colored on one or both sides, and a good bender.

Grade	Caliper	Regular No. 3 finish	Minimum test lb.
Double-lined	.060	29	175
Combined board	.080	23	200
To meet R. R.	.100	18	275
Classifications	.120	15	300

Note. Furnished in 3, 4 or 5 plies to conform to railway and express requirements.

C. Standard Customs for Test Boards.

General.

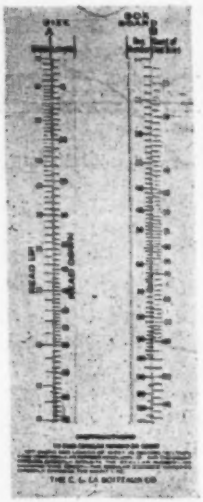
1. All rolls are to be wound tight and true.
2. Breaks or splices to be flagged.
3. Rolls to be furnished with or without cores at the option of the mill.
4. Not less than 20 tons of a grade and 3 tons of a size. Less quantities in special sizes to take extra charges.

Trim of Machine.

Specifications must average within 3 per cent of the maximum trim of the machine.

Tests.

1. Not less than 4 samples of one square foot minimum size are to be taken from each roll.
2. On the 4 samples not less than 4 tests, 2 each way, should be made.



Board Gage

3. Of the 4 samples not more than one sample may have 2 tests below the standard required.

Moisture.

Moisture content shall not exceed 10 per cent.

Bending.

A board to be considered a good bender must be capable of being folded flat under pressure of the fingers twice each way, forward and backward in the same crease both with and across the grain without breaking the surface fibers.

Waterproofing.

Board to be considered waterproof must, when folded into tray form and suspended, hold water for 3 hours without showing moisture on the opposite surface, excepting where sand holes or other defects appear.

Caliper Tolerance.

A variation of .001 inch or 1 point either way is allowable.

Weight.

The average weight of all samples taken from the car must not exceed the weight basis. Not more than four samples per roll required to get average weight.

Sales subject to regular terms and reservations.

Examination of Paperboard and Allied Products for Quality

Paperboards and allied multi-cylinder machine products are not yet standardized, and even if they were, standardization taken by itself would be no criterion of the quality of any particular product. In the last analysis, quality is the suitability of the product for its intended use. A good Patent Coated News, for instance, would be

a perfectly useless liner for making shipping containers, while Kraft Container Liner would be a very poor substitute, in color, printing surface and general suitability, for Patent Coated News. In short, properties which make one grade pre-eminently suitable for a certain application may, and often do, totally exclude its use for another purpose.

It is not the intention at this time to go into their detailed technical examination, but merely to indicate those factors which together go to make up their quality and their importance to the maker and buyer of paperboard. Some of these products need only two or three common tests and more or less cursory inspection; others should be subjected to the careful examination of an experienced technical man, the buyer, and possibly, the superintendent using them, before the shipment is accepted.

The following list gives the important tests used and the more common defects met with in paperboard, also those indefinite factors which, although without precise definition or measurement, are nevertheless very important in the consideration of quality.

In connection with the present section, the fifth installment of this series—in "Paper" for November 20, 1924—should be consulted.

A. TESTS USED.

1. Fiber composition and chemical tests.
2. Nature and amount of filler.
3. Nature and degree of sizing.
4. Thickness. Correctness and uniformity throughout the shipment.
5. Weight per unit of area, i. e., ream, square foot, etc. Correctness and uniformity throughout the shipment.
6. Bursting strength.
7. Tensile strength.
8. Folding endurance; or bending properties.
9. Moisture content.
10. Rigidity or stiffness.
11. Expansion from absorption of moisture.
12. Porosity or tendency to absorb liquids.
13. Flatness.
14. Translucency or opacity.
15. Resistance to water penetration.
16. Finish or gloss.
17. Bulk, or weight for bulk.
18. Grain or machine direction.
19. Fastness of color.
20. Matching of color.
21. Area per unit weight.
22. Tearing strength.

B. PROPERTIES VALUATED BY PERSONAL JUDGMENT ONLY.

1. Fiber distribution or degree of wildness.
2. Hardness.
3. Compactness.
4. Feel.
5. Texture.
6. Dirt.
7. Softness.
8. Hairiness.
9. Printing quality.
10. Color of white papers.
11. Rattle or snappiness.

C. MOST COMMON DEFECTS OF PAPERBOARDS.

1. *Of sheets:*
   a. Not cut square.
   b. Cut to wrong dimensions.
   c. Edges not clean cut.
   d. Curling.
2. *Of rolls:*
   a. Excessive breaks.
   b. Breaks not properly flagged.
   c. Rolls of uneven diameter, at the ends, caused by variation in caliper across the sheet.
   d. Breaks improperly sliced.

In general:

3. Wildness, in folding boxboard.
4. Wire marks in folding boxboard.
5. Felt marks in folding boxboard.
6. Lumpy sheet.
7. Various spots and blemishes, as:
   a. Calender marks.
   b. Crush marks or "checks."
   c. Blow marks.
   d. Scum spots.
   e. Spots of undefibered waste paper, especially parchment, etc.
   f. Dirt.
   g. Spots from stock of previous order left in chests; order contains sheets not yet wholly of proper furnish.
8. Thin or mottled liner.
9. Streaky and rough finish.
10. Damp.
11. Split bond (liner separated from filler).
12. Poor bender, when ordered.
13. Dull color.
14. Poor color match.
15. In calender colored board, streaks, blotches or mottling.
16. Improper finish.
17. Fuzziness or hairness in board for lithographing.
18. Insufficient sizing, as in Ice Cream Pail stock.
19. Low strength, as bursting or tensile.
20. Not stiff enough.

The various chemical and physical tests, mentioned under A, will be fully described, later in this series.

Fiber composition, determined by microscopical analysis, unless by one long experienced in analyzing products made from waste papers, cannot be relied upon to tell the true proportions of the different waste paper packings used in the furnish, as for instance, distinction between Print Manilas and a good quality chip. In conjunction, however, with other definite information at hand concerning the product, such as that a certain stock has been used, alone or with new fibers, presence of much foreign matter indicating chip, etc., this method of determination may be of considerable help in deciding the stocks which have been used in the manufacture of the board.

There is no question as to the unsuitability of groundwood pulp for practically every use involving permanency or much wear and tear, since exposure for even a few hours to direct sunlight renders papers which are high in such pulp, weak and brittle. This action on groundwood, which goes on at all times, though more slowly, taken in conjunction with its short fiber length and poor felting qualities, should condemn manila board containing much of it, for service where it will have to undergo much folding or wear, as for files, guide cards, etc. Tag board, which should be made entirely of manila or similar bast fibers, may be found to contain sulphite, waste papers, etc., which lower its toughness and general quality.

In short, assuming proper treatment of the raw materials in the paper mill, the physical properties of the sheet very largely depend on its composition; and for this reason, the higher grades of board fully warrant microscopical fiber analysis.

The various chemical tests, as for starch, silicate of soda, colors, etc., are occasionally useful.

The filler, its nature and amount, (2) is not of a great deal of importance in most paperboards. Although used in some Thick China and Ivory Board, most folding boxboard mills formerly used china clay or other filler only in Patent Coated News board and similar high class stocks for printing. Today, however, this is rarely done. The mills to obtain the necessary high finish place their reliance

on good quality stocks and furnishes of the right kinds, careful machine running and calendering.

Fillers increase the opacity of white liners of board, and improve the feel and finish, but they invariably reduce the strength, tend to make the sheet brittle, cause less resistance to wear, have an unfavorable effect on the sizing quality and reduce the footage because of the higher weight per unit area obtained at the sacrifice of quality. The improvements in feel and finish which are imparted by fillers can be obtained better in other ways.

From the user's standpoint, the degree of sizing is not of a great deal of importance in boards that are to be made into folding boxes, if the term "sizing" is interpreted to mean resistance to ink penetration. Printing inks have an oil base; and it has been definitely proven that the finish of a sheet, and not the rosin sizing, have the greatest influence in preventing penetration of such inks. Consequently, the usual size tests are not of much value for this class. Modern newsprint contains no size, reliance being placed on the finish to prevent spreading of the ink.

Sizing of course infers the absence of much porosity (12) and considerable resistance to water penetration (15). However, resistance to the absorption of moisture (11) is not necessarily synonomous with resistance to water penetration. Much of the commercial wallboard resists moisture absorption very well, but is not waterproof in the ordinary sense. Waterproofness is essential in such grades as Double Manila Lined News, Solid Manila, etc., used for making ice cream pails, oyster pails, etc., and for shipping container boards in general.

The Valley size tester is useful for comparing the relative degree of the sizing of different runs of board of the same furnish and caliper. The inherent variations in results of the size tests of different samples cut from one piece of board is large; and where the product must be resistant to the passage of water for a certain period, the apparatus designed and described by the *Paper Laboratory of the Department of Agriculture* is a much safer criterion to use.

The degree of expansion caused in board from absorption of moisture (11), is of course a function of its porosity (12). However, there are two separate instruments in use, one for measuring degree of absorption, which will be described later in this series, and the Gurley Densometer, which directly measures the porosity of board or paper. The first instrument referred to measures the expansion of the board in linear units such as inches, or millimeters. The measure of the porosity is especially valuable in investigations and control tests on board to be glued, since different stocks and different runs of the same kind of board vary greatly in porosity and consequently in the quickness and degree with which they absorb adhesive on the machine and give well-glued box laps.

The correctness of caliper and weight per unit area, and uniformity throughout the run, are of great importance. Besides having a very direct bearing on the cost of the board, results considered, these characteristics influence the efficiency of many of the later operations to which it is subjected, such as graining, waxing, printing, cutting and creasing, glueing, etc. These two kinds of variation are probably the most prevalent of any and serious in degree. Mills differ greatly in the closeness with which they can hold to a certain caliper and weight of the product, since the amount of the variation depends in large measure on the equipment and personnel. Hence, in checking up these characteristics in a shipment, especially from a new source, it is well for the purchaser to select a number of sample sheets at random throughout the entire shipment for examination, in order to be sure of a representative sample.

It might be well to mention that there will be found considerably more variation in caliper and weight of boards in rolls than in sheets, as these properties can be more effectively checked at the board machine from sheets than from rolls, and the necessary machine adjustments made.

Strength.

The strength of board in many cases and also the resistance to wear and tear, or toughness, are the prime essentials of quality. In such products of the cylinder machine as sheathing, lining, container boards, tag, suit case and similar boards, etc., bursting strength (6), tensile strength or resistance to direct pull (7) and folding endurance or bending properties (8) are of the first importance. Even in the cases of boards not primarily intended for strength, as in folding boxboard for the smaller size cartons, strength is actually one of the most direct evidences of quality, since high strength implies good stock in the furnish, which has been carefully prepared and processed. There is danger, however, in placing reliance on the results of a single test. For example, certain boards such as imitation jutes made from steamed groundwood pulp, have very high bursting strength and rigidity; but unless guarded against by the use of sufficient longer and tougher fiber like sulphite or kraft, their brittleness makes them very poor benders and weak to sudden strains.

Bursting strength, determined by the Mullen, Ashcroft, Webb or Cady electric tester, is a composite expression of tensile strength and stretch. The Cady tester is very good for use on all but corrugated products, as the pressure is uniform and avoids the fast and slow pressure of hand testers, with the resultant larger variations. For testing the bursting strength of board containing corrugated laminations, such as the familiar double-lined corrugated fiber container board, specially designed testers are necessary. It is true that such products have been tested and frequently are being tested, with testers of the rubber diaphragm type such as the Mullen and Cady. This method, however, is inaccurate and very liable to result in disagreements as to the strength of the board, because with them it is necessary to crush the board and the corrugations very largely before making the puncture test, thus eliminating the strength due to the corrugated arches from the result.

The Webb Paper and Box Tester, endorsed by the Container Club of Chicago, gives a true indication of the value of a corrugated container and corrugated board. The advantages of this tester for testing corrugated boxboard are given in a report by the Bureau of Standards as follows:

"1. It permits of a test being made on a container without destroying its usefulness.

"2. It eliminates the variation of the pressure of the clamp which holds the board in place while the test is being made.

"3. It permits of a test being made of the strong and weak direction of the board (i. e., with and against the grain) due to the wedge type metal plunger used.

"4. It reduces the variation of the test, due to the speed of rotation of the handwheel, in actuating pressure on the board.

"5. It reduces the variation of the test due to the varying area of contact against the board being tested.

"6. It has various attachments by which crushing, tensile and folding values may be determined."

Tensile strength tests are made on the Perkins, Scott, Webb and Schopper machines. These tests are especially valuable when made comparatively in the machine and cross directions. By this means, cylinder and fourdrinier machine products can be easily distinguished, since the fourdrinier product *usually*, though not always, has a higher proportial strength in the cross direction than cylinder products.

The properties of shrinkage and stretch are intimately connected with tensile strength; and on most instruments for determining the tensile strength indicating or recording attachments are provided for determining the elongation of the sample being tested. Boards with a relatively low proportion of strength in the cross direction usually stretch much more in this than in the machine direction. The instrument referred to, for determining the expansion of board by absorption of moisture, will also determine directly the degree of shrinkage in a dry atmosphere. In general it is desirable for a board to have its fibers distributed as evenly as possible in all

directions, as divergencies in tensile strength and shrinage are minimized thereby.

Stretch is very objectionable in board used for lithographing, coating and all printing jobs requiring close register. The amount of stretch ranges from 1 to 4 per cent. However, to go to the other extreme, straw for corrugating purposes is intended merely to form a cushion and is not subjected to appreciable tensile stresses. It must, however, have a maximum of strength in the machine direction in order to withstand the severe crimping action of the corrugating rolls, the corrugations always being made across the machine direction of the paper.

Folding endurance, or bending properties, is naturally most essential in all cylinder machine products which must withstand more or less bending, such as folding boxboard, container board, tag board, etc. There are several automatic instruments for making this test, that of A. B. Green, sold by the Star Brass Manufacturing Company of Boston, being a very scientifically designed duplication and measure of a pure folding action on a sheet. The board machine superintendent or machine tender test roughly for bending by folding a diagonal fold back and forth a few times on the corner of a sheet and noting the degree of cracking-open that occurs. Since in the last analysis, the amount of wear and tear which a sheet will withstand is a combined function of the folding and tearing characteristics, this folding test is important in such products as guide card stock, stock for catalog use, binders, etc., where the necessity for resisting wear and tear is all important.

The "bending" value of container board is best determined by subjecting a sample to the same treatment that a box flap, for instance, receives when it is scored, bent outward to pack the box and folded back for sealing. Tensile strength tests are made before and after this treatment, and the percentage of tensile strength remaining can be reported as an arbitrary figure to represent the bending quality. To one who has never determined this loss, the amount of tensile strength lost in scoring and bending certain grades of container board is often surprising.

Kraft lined container board of inferior quality is sometimes seen which has the appearance of a good bender due to the use of a thin kraft sheet for the outer liner. In reality, the interior of the board may be worthless as a bender, due to the use of very poor stock in the filler. This inferiority is not visible, but the bending and tensile test described will expose it very quickly.

In regard to papers where strength is the prime essential required, it is interesting to note that rosin sizing decreases the folding strength of board but increases its stiffness and bursting trength; and also that "wild" products (described below) are usually stronger than similar boards showing good formation.

To render the test results more valuable to the board user, for comparative purposes the strength ratio affords the best way of reporting results. This is the quotient obtained by dividing the strength as determined by any of the above instruments, by the thickness in ten-thousandths of an inch. A board 35/10,000 inch thick which tested 35 pounds would therefore have a strength ratio of 1.0. The strongest commercial papers seldom or never show a strength ratio higher than 2, although papers having a ratio of 3.8 have been prepared on a laboratory scale.

(*To be continued*)

Investigations of Paper Making Materials

ABSTRACTED BY A. PAPINEAU-COUTURE

The Imperial Institute of London, England, which devotes its time and resources to investigations of the resources of the British Empire and the possibility of their commercial utilization, recently carried out investigations on a number of plants and grasses from tropical and subtropical countries and published the results in the last number of Volume 22 of the *Bulletin of the Imperial Institute.*

Materials Examined

The materials examined were bamboo, probably *Bambusa nana,* from Mauritius, elephant grass from Sierra Leone, bardy reed from Iraq (Mesopotamia), *Costus afer* from Uganda, *Amomum granum-paradisi,* a plant closely related to *Costus afer,* also from Uganda, *Abutilon tortuosum* from South Africa, waste cotton bolls from Egypt, and arrow-root refuse, locally known as "Bittie," from St. Vincent.

These various plants were analyzed with the following results:

			Cellulose		Fiber length		
Name	Water	Ash	As received	On dry basis	Max.	Min.	Av.
Bamboo (ripe stems)	9.7	3.1	45.0	49.8	3.7	0.5	1.9
Bamboo (immature stems)	9.7	2.0	48.5	53.7	3.3	0.5	1.6
Elephant grass	13.5	3.1	44.9	51.9	3.7	0.5	1.4
Bardy reed	12.2	5.8	38.2	43.5	2.4	0.3	0.9
Costus afer	12.9	4.0	44.7	51.3	2.8	0.5	1.5
Amomum granum-paradisi	11.1	8.4	38.5	43.3	2.5	0.5	1.1
Abutilon tortuosum	10.0	0.9	46.5	51.7	1.3	0.5	0.9
Waste cotton bolls	11.6	4.6	33.5	37.9	...	...	...
Arrowroot refuse	12.5	5.1	32.6	37.3	1.1	0.3	0.6

Bamboo was cooked for 7 hours at 160° C. with 20 per cent of caustic soda, calculated on the weight of dry grass, at a concentration of 4 per cent. The ripe stems gave a 32 per cent yield of pulp, the fully developed immature stems gave 36 per cent, while the immature stems from which the lateral shoots have been removed gave 34.5 per cent. The treatment was just sufficiently drastic to give pulps capable of being reduced in the beater, and giving strong brown papers. They bleached fairly readily to cream colored pulps which furnished opaque papers of good strength and quality. The results are very similar to those previously obtained with another variety of bamboo, *Bambusa tulda,* and the material is considered suitable for the commercial production of high grade paper.

Elephant Grass

On cooking the elephant grass for 5 hours at 140° C. with 16 per cent of caustic soda at a concentration of 4 per cent, 46 per cent of pale brown pulp was obtained. It gave a strong paper which contained numerous specks of incompletely disintegrated material; and though it bleached easily to a good white, giving 43 per cent of bleached pulp on the original grass, the specks could not be eliminated entirely. Increasing the cooking time to 7 hours reduced the yields of unbleached and of bleached pulps to 44 and 41 per cent, respectively, but without much change in the quality of the pulps. By cooking 5 hours at 160° C. with 20 per cent of caustic the material was completely disincrusted and the specks entirely eliminated; but the yields fell still further to 41 and 39 per cent, respectively. The papers made from both the unbleached and the bleached pulp, however, were practically as strong as those made with pulp produced under less drastic conditions.

Bardy Reed

Bardy reed was insufficiently disintegrated by cooking 5 hours at 140° C. with 16 parts of caustic soda. As there was insufficient sample to begin another test, additional liquor was added to bring the percentage of alkali to 20 and cooking was continued for another two hours. The yield was low: 37 per cent of unbleached and 26 per cent of bleached pulp; and though the papers were fairly strong they contained incompletely reduced fiber in both cases. The high alkali consumption and low yield, together with the rather poor quality of the pulp, make this an unpromising material for the commercial manufacture of paper.

Cooking *Costus afer* for 5 hours at 140° C. with 20 parts of alkali gave 48 per cent of pulp containing many specks and bleaching fairly readily to a cream tint. Increasing the time of cooking to six hours and the temperature to 160° C. reduced the yield to 43 per cent, but eliminated the specks. The pulp bleached with some difficulty and then furnished a white paper of good strength and quality. The yield is about the same as from esparto, and the bleached pulp would be satisfactory for writing and printing papers.

Amomum Granum-Paradisi

Amomum Granum-paradisi, which is closely related to *Costus afer,* when cooked under the more drastic conditions used for the latter give pretty much the same results; but the yield of unbleached pulp was only 35 per cent. A hard, rather "rattly" paper of good strength was obtained from both unbleached and bleached pulps. The material is considered satisfactory for the manufacture of writing and printing papers.

Abutilon Tortuosum

In order to get a pulp that could be worked up, from *Abutilon tortuosum,* it had to be cooked six hours at 160° C. with 20 per cent of caustic soda at a concentration of 3.5 per cent, and the yields were 33 per cent of unbleached pulp and 28 per cent of bleached pulp. The papers obtained in both cases were somewhat harsh and fairly strong; but the suitability of the material for the commercial manufacture of paper is doubtful on account of the high alkali consumption (16.1 per cent) which is due to the large proportion of pith.

Waste Cotton Bolls

The waste cotton bolls consister of approximately 34 per cent husk, 45 per cent seed, 20 per cent lint and 1 per cent loose dirt and dust. The hand-separated lint contained 82.4 per cent of cellulose on the dry basis. Tests carried out with the husks along showed them to be entirely unsuitable for the manufacture of paper. Cooking the hand-separated lint for 5 hours at 140° C. with 12 per cent of alkali at a concentration of 2 per cent gave 66.5 per cent of unbleached pulp and 62 per cent of bleached pulp, both of which furnished good papers of satisfactory strength. Cooking the material as received for 5 hours at 140° C. with 20 parts of caustic soda at a concentration of 4 per cent gave 29 per cent of sufficiently disintegrated pulp, yielding paper of good strength and medium brown color, but showing many black specks, which could not be entirely eliminated by bleaching. Increasing the cooking temperature to 160° C. reduced the yield to 25 per cent, made the paper slightly darker, and eliminated most of the specks, the quality being otherwise practically the same as before.

By lightly grinding the bolls and then sifting them, 22 per cent of a "crude line" was obtained, which still contained a fair amount of seed and husk. By cooking 5 hours at 140° C. with 16 parts of alkali at a concentration of 4 per cent it gave 51 per cent of pulp which was sufficiently disintegrated except for a quantity of small black particles, and which gave a better paper than the material as received. It bleached with some difficulty and then yielded paper of good strength.

The material is considered as suitable only for use in Egypt without preliminary preparation for the manufacture of brown wrapping paper for local use.

Arrowroot Refuse

The arrowroot refuse, or "bittie," consisted of fibro-vascular bundles of the rhizomes of *Maranta arundinacea* which are left after the starch has been extracted. After washing with boiling water to remove the non-fibrous material, the residue contained 48.9 per cent of cellulose on the dry basis. Cooking six hours at 140° C. with 20 per cent of caustic soda at a concentration of 4 per cent gave 35 per cent of pulp, with a consumption of 15.0 per cent of alkali. The pulp contained incompletely disintegrated fragments and gave a strong harsh paper which shrank excessively on drying. The pulp bleached fairly easily and gave a harsh, "rattly" paper of fair strength which shrank considerably on drying. The material is considered of little value for paper making on account of low yield, high alkali consumption, and poor quality of the paper.

TEHNICAL SECTION, PAGE 136

Water Resistant Folder Stock

SPECIAL INQUIRY No. 22

"We have had difficulty in getting the necessary water resistance in the high finish folder stock we make for oyster pail board, and would welcome suggestions to assist us. We have experimented in different ways, varying the proportion of groundwood to sulphite, from 10 to 50 per cent; have watched the calendering and drying, varying the water boxes, etc. We have changed the beating and refining, going from well beaten stock and light jordaning, to lightly beaten stock with heavy jordaning, getting varying results, but none of them entirely satisfactory.

"As a discussion of this would help us I am submitting our problem to you."

A MEMBER.

REPLY

Apparently you have overlooked what are probably the vital points of the problem: the character of the water in the stock, the quality of the size used, and the sizing conditions. With hard water and high stock temperature it is difficult to get paper thoroughly water resistant. The beating may not be uniform from beater to beater, consequently you should use the freeness test as a control. The quality of the size as prepared and emulsified is likely to be the determining cause of your difficulty, although it may be a combination of all.

A study of Lorenz's "Colloid Studies in Rosin Sizing" in *Technical Association Papers,* VII (1924), would be helpful in understanding how intricate a chemical problem is the sizing of paper.

A trasncript of the discussion on this will be sent to the members who participate in it.

THE SECRETARY.

Work on Paper Sizing Tester

WASHINGTON, D. C., April 8, 1925.—Additional work is in progress by the Paper Section of the Bureau of Standards, in connection with the comparison of the Bureau Electrolytic Paper sizing tester with a commercial apparatus designed for application of the electrolytic method.

Additional data have been obtained by the Paper Section showing that on the Bureau line, variations in voltage cause an error of around 10 per cent in the results obtained with the latter, while the Bureau apparatus is entirely free from such error. It has been found also, that errors amounting to around 10 per cent are caused by air-bubbles forming in the upper part of the cell, this occurring in both testers but less frequently in the case of the Bureau tester. In addition there is the "resistivity error" in both testers caused by air retained in the paper. Additional data as regards comparison of the electrolytic method with the "Curl" and the Carson "Indicator-Flotation" methods, show that results with the latter two methods agree fairly well with each other but do not check those obtained by the electrolytic method.

Testing Anti-Tarnish Papers

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., April 8, 1925.—Additional samples of anti tarnish metal wrapping papers have been received for further investigation by the Paper Section of the Bureau of Standards. Tests are being made as regards composition. As soon as these data are obtained the samples will be forwarded to the Electrolytic Section for furthering tarnishing tests and also investigation as to the relation of chemical impurities contained to tarnishing effect.

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TAPPI Committee on Abstracts and Bibliography, Contribution No. 45

By Clarence Jay West, Chairman, and A. Papineau-Couture

(Continued from issue of April 2, 1925)

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(To be concluded)

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

Affiliated with

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

Cost Accounting Increases Profits*

By G. M. Pelton, Comptroller's Office, Swift & Co.

Industry always has needed and today needs more than ever before, a strong linking between the accounting and all the administrative departments, that is, those departments which are responsible for the operating, merchandising, and general financial functions of the business.

In the past, business men have frequently been justified in criticizing some accountants for inadequate service. In many cases accountants have not only failed to give proper routine accounting information, but have overlooked a larger opportunity to render adequate analytical accounting service, from a broad business standpoint. In other words, they have frequently failed to make their accounting, particularly the analytical service, fit in with the practical administrative requirements of the business.

If accounting is to be most effective, it must meet the practical requirements of business and industry from a technical routine standpoint, and also from a broad business standpoint. That is, the records, reports and analyses should be prepared to meet readily the needs of employees directly engaged in buying, manufacturing, and selling activities, and also the needs of general executives who are responsible for the financial and general administrative affairs of the company. It is the duty of the accountant to determine what kind of information is required in each case, and to furnish it in the best possible manner.

On the other hand, it is equally as important that the executives who are directly responsible for the operation and administration of the business should accept, know the meaning of, and make proper use of the accounting information and analyses supplied to them. Accounting is a constructive business service, a profit-making service, and the business man should realize his money's worth from it. To make this possible, there must be more co-operation between accountants and business executives, and less of the attitude of many executives that accounting is a dead expense.

Viewing a competitive industrial organization in its relation to the outside world, we find it is continuously subjected to various economic, physical, political, and social forces over which it has very little or, in many instances, no control. It buys, manufactures, and sells its products or services in an open market in competition with many other organizations working under similar conditions. The law of supply and demand determines what may be obtained for its products, or services, many of the requirements to be met in preparing them for market, and the constant changes that must be made in business and accounting methods to meet these requirements. That is, the demands made upon business are involved, and are constantly changing. Consequently, the accounting and business methods should be constantly adjusted to meet these changes. Just because certain methods were proper and efficient last year, last month, or yesterday, is no proof, necessarily, that they meet business requirements this year, this month or today. Business is keenly sensitive and is in a constant state of flux and change. For this reason business and accounting methods and services should change accordingly.

Because of these conditions, accountants are offered greater opportunities than ever before to render real service to business, particularly constructive profit-making and loss-reducing analytical service, that will help executives properly to manage their affairs. Furthermore, this service should not be post-mortem in nature, but should be up-to-date, and help to point the way toward better management and improved results. In the past, accountants have been invited to attend too many business post-mortems, and have not been present at enough meetings in diagnosis and treatment of the business patient. Of course, accounting does not offer a solution to all the troubles in business and industry. But, if properly used, it is an important factor in helping to avoid and eliminate mistakes and losses that otherwise might occur, and to make profits that otherwise might be overlooked.

The Three Functional Services of Accounting

As previously explained, accounting should render both a routine and an analytical service from the following standpoints:

1—General, financial and administrative.

2—Merchandising, that is, buying and selling.

3—Operating, that is, manufacturing and distribution.

In the financing and managing of a business, the following primary factors, among others, have to be considered:—

A—That the stockholders or proprietors invest their money in the capital stock of the company for the purpose of obtaining a fair return on their capital invested. This return is represented by the dividends paid on the capital stock issued, and must be paid out of surplus net profits earned.

B—The bondholders invest their money in bonds issued by the company for the purpose of obtaining interest on the money loaned by them. Similarly, the holders of current notes payable are entitled to interest, which the company must pay promptly.

C—The money invested in working capital, such as accounts, inventories, etc., and in fixed properties, or any other assets, should work rapidly and efficiently. For instance, the investment in accounts receivable should be collected promptly and with a minimum loss,

* Management and Administration.

so it may be again used in inventories, etc. In all cases, however, whether this money is used in working capital or fixed properties, its investment must be justified first of all, and secondly, it should be used efficiently and economically after its investment.

The point is that capital costs its hire in the shape of interest and general financial expenses on borrowed funds and profits due to the stockholders. Fundamentally then, there are two important problems to be considered in connection with capital:

1—It should be obtained as economically as possible, both as to amount and cost.

2—Proper use should be made of the capital obtained.

The Treasurer is primarily responsible for the financing of the company, that is, for securing sufficient funds to meet the capital requirements of the various activities of a business. Naturally the Treasurer and financial executives need to follow all trends in the business, and be fully informed of all changes which occur, why additional funds are necessary, their cost and for what purpose they are to be used. The secret of successful financing is to use the least possible capital consistent with properly financing and conducting a business. Idle capital is a burden. It produces interest costs and overhead expenses for which no value is received. This emphasizes the importance of reducing borrowing to a minimum, keeping cash and bank balance as low as is consistently possible, and of securing a rapid turnover on all capital employed.

Responsibility of Merchandising and Operating Executives

Making economical and efficient use of capital is a direct responsibility of the merchandising and operating executives. Each plant, each branch and each department is in reality a separate business. Each uses its own capital in the shape of accounts, inventories, fixed properties, etc., and each has its own organization. Therefore, each should be fully and finally accounted for, and should appreciate the fact that financial costs are just as much of a burden to business as are merchandising and manufacturing, or operating costs and expenses. Interest on borrowed money, for example, is just as truly a money-out-of-pocket expense as is money paid for wages.

The merchandising success of a business organization is determined primarily by its ability to give satisfactory service and to earn a satisfactory competitive return on the stockholders' or proprietors' investments. Likewise, the final measure of the operating success of a company is its ability to produce quality products at a minimum cost. It is one of the functions of the general management to see that these results are obtained. To accomplish this most satisfactorily it is necessary to give all department heads full and complete cost figures and information covering their operations.

First of all, however, it is necessary to educate them as to the basis on which these figures are determined, their meaning, the system used in accounting for the business, how to analyze the figures, and, most important of all, how to get direct action which will correct errors and produce improved results. In many cases accountants fail to give this service, that is, they fail to prepare proper accounting reports, and to analyze satisfactorily these reports in a simple way, so that they may be understood and be of value to the business man who knows very little, or possibly practically nothing, about accounting. This service is vitally important in present-day administration of business.

Distinction Between Financial Accounting and Cost Accounting

Many business men have an erroneous idea that cost accounting is something very different from general and financial accounting, and that, in a broad sense, it has little, ir anything, to do with profit making in the administration of business. Furthermore, they seem to be under the impression that both so-called "cost" and "general financial" accounting are more or less necessary evils to be used in a limited, isolated, and unrelated manner, and that the management should not take them too seriously, because to do so might slow down the business and, proverbially speaking, might develop a condition where the "tail would wag the dog."

As a matter of fact, the writer has failed, so far, to find much, if any, real difference between "cost" and "general financial" costs. They are both costs. He has also been unable to find extreme cases where the accounting had developed to the point that it was the "tail that wagged the dog." He is convinced that from a broad business standpoint, both the so-called "cost" and "general financial" accounting are more or less inter-related and inseparable, and that the most important function of all accounting is to give the management full and complete constructive analytical service which will help to make profits, and prevent or reduce losses through prevision of developments.

It is the function of accounting to give constructive information, which will properly co-ordinate the merchandising, operating, and financial activities, and see to it that no vital factors are overlooked. As previously explained, this service should at all times be constructive and not post-mortem in nature. It is information of this kind that guides the business man in knowing what he can afford to pay for his raw materials, the costs of production and doing business, and the net returns he should realize for his products and services, based on current market prices. But if a business man chronically fails to recognize sound accounting information of this kind, and goes into a competitive market and regularly buys his raw materials and supplies and sells his products and services at prices which do not give him a sufficient spread to cover his total costs of doing business, including a fair return on his invested capital, then his business cannot be successful.

Total Cost of Doing Business

The average business man is keenly interested in the final net profits earned on the invested capital used in his business. He knows that these earnings serve as one of the most important measures of industrial and business efficiency. He also knows that profits and losses represent the difference between the value of products and services sold, and the cost of these products and services, including the total expenses of doing business. Naturally then, if the net results are to be accurately and correctly determined, and are to mean anything, it is necessary in figuring the costs and expenses of doing business, to include all costs and all expenses, that is:

1—The total costs and expenses directly or indirectly incurred in the manufacture or preparation of the products or services sold.

2—All costs and expenses of purchasing raw materials and supplies, and also those incurred in the distribution and sale of the furnished products or services.

3—All general administrative and financial costs and expenses of every kind.

A good many business men fail to consider all of these costs and expenses in determining their final net results. They seem to be under the impression that their business is fundamentally different from other businesses, and that they are justified in disregarding certain items entering into their total cost, particularly when competitive conditions are keen. Frequently they fear that their business is being etherized into a state of inaction through a too comprehensive or technical system of accounting.

A man of this type may be, and usually is, under the impression that he is making a good or fair profit, whereas his profit may be dangerously low or he may be suffering an actual loss. His Profit and Loss and Surplus accounts may show an increase over the previous period or year. But possibly this increase is partly or largely due to certain items of cost and expense, such as depreciation and other items of a similar nature, having been overlooked. Possibly certain expenses have been capitalized instead of having been charged to expense. This emphasizes the need at all times, then, for considering all costs and expenses in determining whether or not sales may be profitably made at certain prices. If more business men will bear this in mind, there will be fewer failures, less business done at a loss, or at such a low margin of profit that it fails to show a proper return on the money used.

As previously explained, the total costs and expenses which should be included in figuring a business are:

1—Buying cost and expenses covering materials and supplies purchased.

2—Operating or manufacturing costs and expenses of all kinds, that is, Raw Materials and Supplies used, as previously explained, and labor and expenses, including proper and consistent charges for depreciation and obsolescence.

3—Financial and administrative costs and expenses including salaries, etc.; interest on borrowed money and write-offs covering financing and re-financing; federal taxes; profits or dividends to proprietors and stockholders; a final balance to be carried to Profit and Loss or Surplus account to help provide for future needs, such as expansion of the business, losses, etc.

What to Include in Total Cost

Naturally, there is a difference of opinion as to whether or not all of the items enumerated above should be considered in determining the total cost of doing business. But suppose you, for example, were to sell your products at a price which failed to cover all of these money-out-of-pocket charges. Suppose you were to sell your products or services on a break-even basis, excluding dividends, or dividends and interest on borrowed money; suppose you failed to include depreciation, administrative expenses, and salaries. Suppose you were to sell your products at enough only to cover plant cost. You might do this, but you would be merely "kidding" yourself, because sooner or later you probably would have to take this money out of your own pocket. Yet this is exactly what is occurring in many business and industrial organizations today.

If you are in a legitimate business, and are giving an economical and competent service to the trade, you should expect your business to return to you its total costs, expenses and a profit. At times, of course, you cannot get this. But that does not justify your disregard of some of these items in figuring the total return to which you are entitled. Instead, irrespective of how your books are kept, this simply argues for keping all of these charges before you at all times, so you will know exactly what you are doing. Furthermore, from a sound administrative standpoint, you should see to it that this information is kept constantly before your merchandising, operating and other executives. Otherwise they have no way of knowing the full amount of the charges they are expected to meet. Not knowing it, they will not ask it in the sale price and they are unlikely to get it if they do not ask it.

Disregarded Items

As already stated, the inclusion of some of the above items is subject to dispute and is frequently disregarded by business men in figuring total cost of doing business. Some of the more commonly disputed items are: Interest on borrowed money and financing expense; depreciation and obsolesence of properties and equipment, etc.; administrative salaries and expenses; federal taxes; and profits or dividends due to proprietors or stockholders. However, it should be borne in mind that these represent actual money-out-of-pocket expenses that cannot be evaded, and if your sales do not cover them, you will sooner or later have to bear them yourself.

Of course, you will not have to include anything for profit or dividends if you are not expecting any. And if you make no profit you will have no federal income tax to provide for. But most business men expect to make a profit. This does not mean that all of these expenses and charges should be entered and distributed in a formal way in your books of record, although administrative expenses, interest on borrowed money, depreciation and obsolescence, etc., should be handled in this manner. It does mean, however, that all of them, including federal taxes and profits or dividend requirements, should be constantly considered by the management in determining total cost of doing business and, therefore, the prices at which products or services should be bought and sold to produce a satisfactory return to the owners.

Typical Departmental Statement

An excellent example of the value of proper accounting service from a total business cost standpoint may be illustrated by explaining the preparation, analysis and use of a typical departmental statement containing full and complete information covering the financial manufacturing and merchandising costs and results of a given department. Irrespective of the type of cost finding used, a departmental statement, if properly prepared, should contain certain information somewhat as follows:—

1—A record of the departmental sales, cost of goods sold, and the gross or merchandising profit.

2—Summary figures covering not only the cost of the finished product, but all other costs and expenses, including those of a direct, indirect, fixed property, selling administrative, financial nature, etc.

3—The final net results of the department before and after deducting operating interest, that is:

A—Interest paid on borrowed money.

B—Federal taxes.

C—Dividends due and payable to stockholders, etc.

4—The amount of capital, such as land, buildings, machinery and equipment, inventories and accounts receivable, used in conducting the business of the department, and the efficiency obtained in its use.

5—Current and accumulative comparisons covering gains, shrinks, yields, costs, expenses, results, turnovers, etc.

In short, a departmental statement of this type is a complete business report covering the combined financial, operating and merchandising transactions of a department. It indicates whether a department is operating efficiently or inefficiently, and what, if anything, should be done to bring about improvement. All of this information is vitally important to the merchandising man who is directly responsible for the results of a given department. Most of it is equally valuable to the operating man directly responsible for production and manufacturing costs. Finally, both the individual departmental statements, and a summary of departmentals covering the business as a whole are of interest and value to general administrative and financial executives. For example, a given department, or line of business may show improper results because of avoidable high costs and expenses, of excessive stocks of goods, and slow turnovers resulting in a minimum number of profits on each dollar used in such stocks, or because of excessive fixed properties, etc. The financial management needs to know, in a general way, and frequently in a very specific way, just what the conditions are, and if the business of a department or of an entire line of business is being handled as efficiently and as economically as possible.

Basis of Satisfactory Administration

Broadly then, satisfactory business administration, whether or not it is of a single department or of a business as a whole, depends on efficient organization, proper personnel, methods and equipment, satisfactory cost information of all kinds, and economical use of capital. The policies of the company must be sound, the business should benefit from its past experience, it should be wide-awake to the actual conditions and influences affecting it now, and should exercise the keenest judgment possible in forecasting future trends and conditions. It should recognize the need for following closely the changes which are constantly taking place in business and industry—this not only means the changes reflected in the business cycle affecting all business, a single industry, or even a single company, but it also means the changes due to invention, improvements in processing and production methods in general, changes in distribution, or the general plan of doing business, etc. The individual company must recognize these changes and improvements to earn a fair competitive return on its invested capital.

In final analysis both accountants and general executives should recognize and understand the problems and services of the other, and should co-operate in attempting to secure the best possible final results for the company as a whole.

Power Plant Depreciation Factors*

The chief factors entering into and causing depreciation in value are:

1—Wear and tear or amount and kind of use to which building or equipment is subjected.

2—Deterioration from age, neglect, or misuse.

3—Obsolscence.

4—Location, and effect of climate and other conditions of environment.

5—Damages from accidental, climatic, or other unforeseen conditions.

Factors that arrest depreciation are:—

1—Care and attention given to building or equipment.

2—Maintenance and repairs.

3—Changes and alterations to prevent obsolescence.

All of these factors must be considered carefully when establishing and rechecking depreciation rates.

Because of the varying degrees in which these factors influence the life of buildings and equipment in different plants, it is impossible, generally, to fix a depreciation rate for any particular type of equipment that will apply in all cases. Neither is it practicable to fix a single depreciation rate to be applied to a plant as a whoe. Variations in the factors affecting the plant's equipment make such an attempt unwise.

The various items of fixed assets must be classified into subdivisions so small that a single depreciation rate can be used accurately to write off the value during its useful life of each item contained in the sub-division. The degree of accuracy with which depreciation rates may be fixed increases as the size of the classification sub-divisions decreases.

Table 1 gives depreciation rates and length of life for a number of items commonly found in power plants. Many of the items have rates that vary between wide limits. This variation measures the influence of the 8 factors mentioned before. In plants where they are most favorable the lower rate applies while the higher rates are used under most unfavorable factors.

To determine individual rates it is necessary to consider each item and determine the extent to which the factors affect its life. With this information a rate is fixed between the limits set which will give as accurate an estimate as possible of the depreciation accruing each year of the life of the item.

Table 1—Depreciation Rates and Length of Life for a Number of Items Commonly Found in Power Plants

Item	Depreciation, Per Cent	Life, Years
Air compressors	4 – 5	20 – 25
Alternators	4 – 5	20 – 25
Belting	4 –12	8 – 25
Blowers	5 – 6⅔	15 – 20
Boilers—General	2½–10	10 – 40
Firetube	7½	13
Watertube	5	20
Breaching and connections	3 –10	10 – 33
Buildings—Brick	2 – 7	14 – 50
Concrete	1½— 4	25 – 70
Corrugated iron	10	10
Fireproof modern	2 – 4	25 – 50
Frame	3 – 6	17 – 33
Chimneys—Brick	3 – 7	14 – 33
Steel	4 –10	10 – 25
Chutes—Loading and unloading	10 –25	4 – 10
Clinker grinding machinery	8⅓	12
Compressors—Air	6 – 7½	13 – 17
Condensors	3½–10	10 – 30
Converters—Rotary	3 – 6⅔	15 – 30
Conveyors—Coal or ash	5 –10	10 – 20
Cranes—Locomotive	9½–10	10 – 11
Traveling	4½– 7½	17 – 22
Engines—Gas	5 –10	10 – 20
Oil	3½– 4	25 – 30
Steam	4 –10	10 – 25
Fans—Ventilating	7½	17
Feed-water heaters	3½– 6	16 – 30
Fire extinguishers	10	10
Fuel Economizers	4	25
Fuel oil equipment	4	25
Furnaces—Air	7½	17
Gages—Engine-room equipment	10	10
General gas appliances	8 –10	10 –12½
Generators	3 –10	10 – 33
Hand cars	7	14
Heating and ventilating systems	4 – 6	17 – 25
Hoists	7½–12½	8 – 17
Hose—Fire	20	5
Hydrants	2 – 3	33 – 50
Injectors—Boilers	10	10
Lockers—Steel	5	20
Meters—Electric	5 – 8	12½– 20
Gas	4	25
Natural gas	20	5
Oil	7½	17
Steam flow	10	10
Water	5	20
Motors—Electric	4 –12½	8 – 25
Pavements—Asphalt	7	14
Brick	4½	22
Wood block	3½– 5	20 – 30
Piping—General	4 –10	10 – 25
Air	5	20
Fuel oil	5 –10	10 – 20
Water and steam	5 – 7½	17 – 20
Covering	4 – 4½	22 – 25
Plumbing	3½– 4	25 – 30
Power plant equipment	7½	17
Pumps	5 – 8⅓	12 – 20
Shafting—Pulleys, etc	4 –10	10 – 25
Shop furniture	10	10
Sprinkler systems	3 – 7½	17 – 33
Stacks—Brick	3 – 7	14 – 33
Steel	4 –10	10 – 25
Stand pipes	1 – 2	50 –100
Steam power plants	5	20
Steam separators	10	10
Steam traps	7½	17
Stokers—Fixed parts	5	20
Moving parts	20	5
Superheaters	3⅓	33
Switchboards	8⅓	12
Transformers	4½– 6⅔	15 – 22
Turbines—Steam	2½– 6⅔	15 – 40
Water	2 – 3⅓	33 – 50
Valves—General	4 – 6	17 – 25
Gate, brass	5	20
Gate, iron	10	10
Ventilating system	5	20
Wagons, dump and hauling	18¾	5½
Water purifying plant	5½	18
Wiring—Electric	7½	17

*Management and Administration.

Lord Rothermere's Views on Canadian Pulp

Recently the Canadian Pulp and Paper Association drew to the attention of Lord Rothermere statements in the Technical and General Press attributing to him expressions to the effect that Canada was not a factor in the supply of bleached sulphite for making artificial silk, particularly because Canadian woods did not yield chemical pulp suitable for this special purpose.

Knowing that Canadian chemical pulp manufacturers have for some years made a special quality of bleached sulphite wood pulp, the reputation of which stands high with manufacturers of artificial silk, the Association drew this matter to the attention of his lordship.

Lord Rothermere has now advised the Association that the statements attributed to him are quite contrary to his own belief that in Canada there is the greatest supply of the most suitable wood for making chemical pulp for this special purpose and that the increasing business of Canadian chemical pulp mills in bleached sulphite wood pulp specially made for the manufacture of artificial silk fully confirms his real views in this connection which are quite contrary to those erroneously attributed to him in the Press.

Wilmington Favorable for Pulp Manufacture

Prospects for the manufacture of wood pulp for paper in the Wilmington, N. C., section are claiming the attention of local interests. State Forester H. M. Curran, while in Wilmington, said that he had great faith in the possibilities for development of this industry in the Wilmington district. While there, the State Forester visited Palmetto Island, and also looked over timber in Brunswick county. He was accompanied by General E. F. Glenn.

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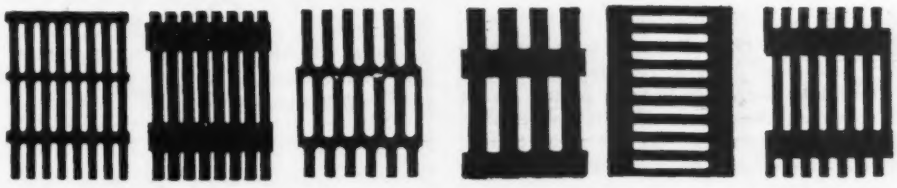

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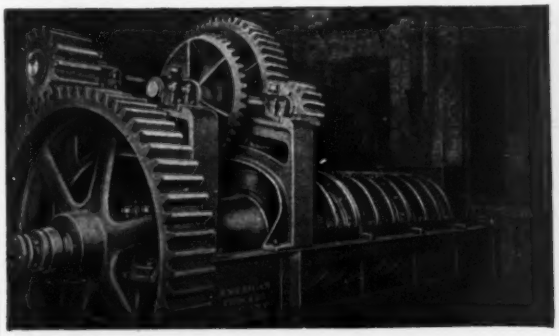

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Proposed Definition of News Print

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., April 8, 1925.—Following is the proposed definition of standard news print paper as regards assessment of import duty recommended by the Paper Division of the Bureau of Standards to the Treasury Department. This is the definition about which there was so much discussion at last week's hearing and about which there will undoubtedly be further discussion at the forthcoming conference on April 17.

Standard news print paper as covered by Paragraph 1672 of the Free List of the Tariff Act of 1922 is hereby defined as paper intended for use in the printing of standard editions of newspapers and shall conform to the following specifications:

Weight.—500 sheets, each 24 x 36 inches, shall weigh not less than 30 pounds nor more than 35 pounds.

Rolls.—The paper shall be in rolls not less than 16 inches wide and 28 inches in diameter.

Stock.—Not less than 70 per cent of the total fiber shall be groundwood; the remainder shall be unbleached sulphite. Whether the fiber is unbleached shall be determined by Bright's Method.

Finish.—The average of 5 tests in machine direction and 5 tests in cross direction on both sides moving the paper after each test, made with the Ingersoll Glarimeter, shall be not more than 50 per cent Gloss.

Ash.—Shall be not more than 2 per cent.

Degree of Sizing.—Time of transudation of water shall be not more than 10 seconds by the Ground Glass Method or 5 seconds by the alternate methods. The test shall be made as follows:

GROUND GLASS METHOD.

Cut the specimen of the sample to be tested about 6 inches square, fold into a box-shape about 2 inches square and 2 inches high, open at the top, the tabs formed by folding being held by paper clips. Place the box-shaped specimen on the ground surface of a piece of ground glass lying on a dark surface. Partially fill with water at 25 degrees, 1 degree, C. After 10 seconds lift the box-shaped specimen and observe the ground glass underneath. If water has penetrated through the specimen it will show on the ground glass as dark spots or streaks which quickly disappear by evaporation. The method was described in the PAPER TRADE JOURNAL, September 4, 1924, page 49.

ALTERNATE METHOD 1, VALLEY SIZE TESTER.

By the customary method of using this apparatus.

ALTERNATE METHOD 2, CURL METHOD.

Provide a vessel of at least 2 quarts capacity and fill with water at 25 degrees, 1 degree, C. The larger the vessel the easier it is to hold the temperature constant. Cut the specimen of the sample to be tested in the shape of a right triangle, one leg of which should be about 2 inches long and in the machine direction of the paper, and the other leg about 3 inches long. Make a crease parallel with and about half or three quarters of an inch from the shorter leg of the triangular specimen, so that one part of the specimen makes an agle with the remainder. Holding the specimen in one hand by the point opposite the shorter leg, place it on the surface of the water so that the shorter leg is against one side of the vessel, in which position it will remain more steady than if placed in the center of the vessel. Start a stop-watch simultaneously with this operation. The specimen curls and the longer dry portion serves as a pointer as it moves across the field of vision. When the curling in the initial direction ceases and the instant the specimen starts to uncurl the stop-watch is stopped and the time recorded. The test has been described in different forms in the PAPER TRADE JOURNAL of April 6, 1922, and of October 23, 1924.

SAMPLING.

Samples for testing shall be taken from at least 10 different units of the shipment. The specimens tested shall be selected so as to be representative of the entire sample.

PHILADELPHIA MERCHANTS ENCOURAGED

(*Continued from page 32*)

ing, a new organization has been effected to carry on the business of the individual concerns. The new company which will conduct the combined business will be known as the Schuylkill Paper Company and will take over the distribution of the various lines handled by the two firms. It was for the purpose of rendering better service to its customers that the combination was perfected. The offices of the new Schuylkill Company will be located in the Drexel Building in Room 1016 while the former warehouses of the Keystone Company at 1621 Bainbridge street will be devoted to the storing of the stocks. Under the new regime the head of the company will be James Andrews, President and Frederic S. Balch, Secretary and Treasurer. Both members of the firm have long been identified with the fine paper distribution industry of the city. President Andrews having been identified with one of the larger houses during the score of years of his association with it. Mr. Balch is the son of A. C. Balch of the J. B. Lippencott Company, publishers.

Fire in Barrett Plant

A spectacular fire destroyed considerable roofing papers and chemicals used in their manufacture during the week at the plant of the Barrett Company, 36th street and Gray's Ferry Road and caused a loss of several thousand dollars in buildings and materials. The fire started in the paper saturation department, where the paper is run through the eight large machines that dip it in the vats containing tar and was caused by combustion in the blowers that carry away the gases.

Paper Exhibits at Gift and Art Show

Among the paper firms that exhibited at the annual Gift and Art Show held in the Adelphia Hotel during the week were the importing firms of Julius Beckhard Company, Inc., of Stuttgart, Germany, with local offices at 3 West 29th St., New York, showing a line of high grade imported hand made papers adapted for papeteries and announcement stocks with line envelopes to match and novelty cards, and deckle edge papers and cards and a comprehensive assortment of fancy tissues and glassines in bulk quantities. Among the papers were impregnated lines with several tints in single designs and deckle edged hand hammered specialties. The exhibit was in charge of A. C. Moss of the New York offices.

Another exhibitor was The Arthur Goodman Company, 215 Fifth Ave., N. Y., with a line of English papers from the Newton Mill, Hyde, England, owned by Jacobsen, Welch and Co., Ltd. and manufacturing fancy stationery requirements.

E. Latimer, Jr. Expands

Having recently made extensive expansion in both stocks and personnel of his paper distribution business, E. Latimer, Jr., 126 N. 4th street, has further developed his business by the addition of new members on the sales organization and the stocking of new lines. The most recent sales force additions are William Tustin, well known in the local trade as the Manager of the Whitaker Paper Company and for many years on the organizations of the D. L. Ward Company and the old Megargee-Hare Company, and Edward Lasky who formerly was associated with the Whiting-Patterson Company. Both will be connected with the outside sales force. Among the new lines installed in stock are the New Era Ledgers, made by the Fox River Paper Company, of Wisconsin, and the Asset Bonds produced in the mills of the Lee Paper Company.

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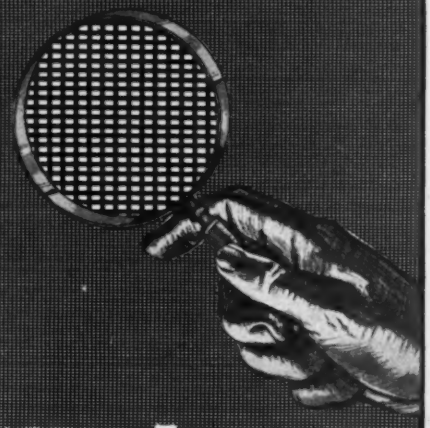

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NEW YORK IMPORTS

WEEK ENDING APRIL 4, 1925

SUMMARY

News print.....796 rolls, 877 bls.
Wrapping paper.....29 cs., 94 bls., 5 pgs.
Printing paper.....391 cs.
Wall paper.....18 bls., 24 cs.
Cigarette paper.....2,484 cs.
Surface coated paper.....105 cs.
Writing paper.....13 cs.
Drawing paper.....2 cs.
Filter paper.....96 cs., 41 bls.
Fancy paper.....8 cs.
Paper hangings.....28 cs., 31 bls.
Letter paper.....2 cs.
Note paper and envelopes.....117 bls.
Painted paper.....4 cs.
Miscellaneous paper.....26 cs., 209 bls., 339 rolls

CIGARETTE PAPER

R. J. Reynolds Tobacco Co., McKeesport, St. Nazaire, 1,290 cs.

De Manduit Paper Corp., McKeesport, St. Nazaire, 180 cs.

American Tobacco Co., McKeesport, Bordeaux, 900 cs.

F. P. Gaskell & Co., Zarembo, Havre, 20 cs.

Liggett & Myers Tobacco Co., Zarembo, Havre, 20 cs.

P. J. Schweitzer, Rochambeau, Havre, 54 cs.

Standard Products Corp., Indep. Hall, Havre, 20 cs.

PAPER HANGINGS

A. C. Dodman, Jr., Inc., Aurania, Liverpool, 21 cs.

W. H. S. Lloyd & Co., Aurania, Liverpool, 11 bls.

W. H. S. Lloyd & Co., Minnekahda, London, 20 bls.

W. H. S. Lloyd & Co., Minnekahda, London, 7 cs.

WALL PAPER

F. J. Emmerich & Co., Baltic, Liverpool, 6 bls.

F. J. Emmerich & Co., Homeric, London, 1 bl.

F. J. Emmerich & Co., Aquitania, London, 2 cs.

A. C. Dodman, Jr., Inc., Aquitania, London, 4 cs.

A. C. Dodman, Jr., Inc., Aquitania, London, 5 bls.

Whiting & Patterson, Inc., Aquitania, Havre, 9 cs.

A. C. Dodman, Jr., Inc., Nevisian, Antwerp, 9 cs.

R. F. Downing & Co., Minnekahda, London, 5 bls.

F. J. Emmerich & Co., Minnekahda, London, 1 bl.

NEWS PRINT

Parsons & Whittemore, Inc., Tasmanic, Kotka, 628 rolls.

Parsons & Whittemore, Inc., Tasmanic, Kotka, 817 bls.

L. Schulman Co., Tasmanic, Kotka, 168 rolls.

Borregaard Co., Inc., Bergensfjord, Oslo, 60 bls.

PRINTING PAPER

P. Puttman, Samland, Antwerp, 20 cs.

B. F. Drakenfeld & Co., Aurania, Liverpool, 19 cs.

P. C. Zuhlke, Nevisian, Antwerp, 1 cs.

Maurice O'Meara Co., Tasmanic, Kotka, 351 cs.

WRAPPING PAPER

Steiner Paper Corp., Bergensfjord, Drammen, 29 cs.

Southern Pacific, R. Maru, Genoa, 88 bls.

M. Haas, W. Eldara, Antwerp, 5 pgs.

Wilkinson Bros. & Co., Inc., W. Eldara, Antwerp, 6 bls.

FILTER PAPER

Franco American Importing Co., McKeesport, Bordeaux, 80 cs.

H. Reeve Angel & Co., Inc., McKeesport, Bordeaux, 41 bls.

H. Reeve Angel & Co., Inc., McKeesport, Bordeaux, 6 cs.

H. Reeve Angel & Co., Inc., Minnekahda, London, 10 cs.

DRAWING PAPER

H. Reeve Angel & Co., Inc., Minnekahda, London, 2 cs.

WRITING PAPER

Frederick Loeser & Co., Zarembo, Havre, 7 cs.

Yoske Bros., Zarembo, Havre, 1 cs.

Coenca Morrisson Co., Rochambeau, Havre, 4 cs.

N. Snellenburg, Indep. Hall, Havre, 1 cs.

LETTER PAPER

Distinctive Writing Paper Co., Homeric, Havre, 2 cs.

NOTE PAPER AND ENVELOPES

A. Goodman & Co., Aurania, Liverpool, 117 bls.

SURFACE COATED PAPER

P. Puttman, Samland, Antwerp, 10 cs.

P. C. Zuhlke, Nevisian, Antwerp, 50 cs.

Gevaert Co. of America, Nevisian, Antwerp, 45 cs.

FANCY PAPER

Whiting & Patterson, Inc., Homeric, London, 8 cs.

PAINTED PAPER

Independent Forwarding Co., Rochambeau, Havre, 4 cs.

MISCELLANEOUS PAPER

Guibout Freres, Homeric, Havre, 13 cs.

J. W. Hampton, Jr., & Co., Nevisian, Antwerp, 209 bls.

Japan Paper Co., Rochambeau, Havre, 7 cs.

Hudson Forwarding Co., Rochambeau, Havre, 3 cs.

•Du Pont Sellophane Co., Rochambeau, Havre, 3 cs.

Drinhausen Hollkott Paper Co., Francisco, Antwerp, 339 rolls.

RAGS, BAGGINGS, ETC.

E. J. Keller Co., Inc., Valperga, Genoa, 55 bls. bagging.

Castle & Overton, Inc., Valperga, Genoa, 87 bls. rags.

V. Galaup, Valperga, Leghorn, 39 bls. rags.

A. W. Fenton, Inc., Valperga, Leghorn, 46 bls. rags.

Manufacturers Trust Co., Valperga, Naples, 119 bls. rags.

Union Natioanl Bank, Valperga, Naples, 69 bls. rags.

The Stone Bros. Co., Valperga, Naples, 11 bls. rags.

E. J. Keller Co., Inc., Valperga, Naples, 53 bls. rags.

E. J. Keller Co., Inc., Mt. Clay, Hamburg, 133 bls. rags.

E. J. Keller Co., Inc., Mt. Clay, Hamburg, 94 bls bagging.

National City Bank, Mt. Clay, Hamburg, 115 bls. jute waste.

National City Bank, London Mariner, London, 432 bls. rags.

Irving Bank Columbia Trust Co., London Mariner, London, 47 bls. rags.

J. B. Moors & Co., London Mariner, London, 88 bls. bagging.

A. W. Fenton, Inc., West Isleta, Cardiff, 218 bls. rags.

E. J. Keller Co., Inc., McKeesport, St. Nazaire, 177 bls. rags.

E. J. Keller Co., Inc., McKeesport, St. Nazaire, 48 bls. bagging.

E. J. Keller Co., Inc., McKeesport, Bordeaux, 46 bls. bagging.

Baltimore Trust Co., McKeesport, Bordeaux, 187 bls. bagging.

Royal Manufacturing Co., Aurania, Liverpool, 40 bls. cotton waste.

Castle & Overton, Inc., Aurania, Liverpool, 108 bls. bagging.

W. Barnet Son, Baltic, Liverpool, 103 bls. rags.

B. D. Kaplan, Baltic, Liverpool, 32 bls. rags.

Irving Bank Columbia Trust Co., Madonna, Constantinople, 80 bls. rags.

State Bank, Rozan Maru, Leghorn, 59 bls. rags.

National City Bank, Rozan Maru, Leghorn, 136 bls. rags.

Royal Manufacturing Co., W. Eldara, Antwerp, 25 bls. cotton waste.

L. H. Abenheimer, W. Eldara, Antwerp, 50 bls. rags.

American Sea Grass Co., Zarembo, Havre, 115 bls jute waste.

Whaling Waste Products Co., Zarembo, Havre, 92 bls. card waste.

Burmon & Bolonsky, Zarembo, Havre, 32 bls. rags.

Royal Manufacturing Co., Zarembo, Dunkirk, 30 bls. cotton waste.

Maurice O'Meara Co., Zarembo, Dunkirk, 26 bls. rags.

Katzenstein & Keene, Inc., Zarembo, Dunkirk, 50 bls. rags.

D. M. Hicks, Inc., Zarembo, Dunkirk, 47 bls. rags.

National City Bank, Rochambeau, Havre, 172 bls. rags.

Equitable Trust Co., Rochambeau, Havre, 69 bls. rags.

Royal Manufacturing Co., Rochambeau, Havre, 38 bls. cotton waste.

National City Bank, Rochambeau, Havre, 37 bls. cotton waste.

Ayres W. C. Jones, Rochambeau, Havre, 44 bls. rags.

C. Braendle, Francisco, Antwerp, 194 bls. rags.

L. H. Abenheimer, Indep. Hall, Havre, 107 bls. rags.

Furness Withy & Co., Indep. Hall, Havre, 41 bls. rags.

Atterbury Bros., Inc., Indep. Hall, Antwerp, 67 bls. rags.

Atlas Waste Manufacturing Co., Indep. Hall, Havre, 84 bls. rags.

V. Galaup, Indep. Hall, Havre, 2 bls. rags.

International Acceptance Bank, Indep. Hall, Havre, 38 bls. rags.

Katzenstein & Keene, Inc., Rai. Maru, Hamburg, 72 bls. new cuttings.

Castle & Overton, Inc., Titania, Genoa, 39 bls. rags.

OLD ROPE

Brown Bros. & Co., Samland, Antwerp, 212 bls.

Brown Bros. & Co., Francisco, Hull, 14 bls.

Brown Bros. & Co., Francisco, Hull, 277 coils.

W. Schall & Co., Mt. Clay, Hamburg, 39 coils.

G. M. Graves & Co., London Mariner, London, 65 coils.

MANILA ROPE

Ellermans' Wilson Line, Minnekahda, London, 44 bls.

N. Y. Cordage Co., Nevisian, Antwerp, 285 rolls.

CASEIN

Bank of The Manhattan Co., Tuscaloosa City, Buenos Aires, 500 bags.

WOOD PULP

Tidewater Paper Mills Co., Bornholm, Weymouth, N. S., 12,214 bls. wood pulp.

Nilsen Lyon & Co., Bergensfjord, Gothenburg, 360 bls. pulp.

E. M. Sergeant & Co., Bergensfjord, Oslo, 775 bls. chemical pulp.

F. R. Eaton, Nova Queen, Wolfville, N. S., 6,600 bls. wood pulp, 660 tons.

Johaneson, Wales & Sparre, Inc., Natirar, Hernosand, 2,400 bls. sulphate pulp.

Castle & Overton, Inc., Arabic, Hamburg, 452 bls. wood pulp.

Johaneson, Wales & Sparre, Inc., Mt. Clay, Hamburg, 186 bls. sulphate pulp.

WOOD PULP BOARDS

Lagerloef Trading Co., Tasmanic, Kotka, 1,314 bls.

Lagerloef Trading Co., Tasmanic, Kotka, 505 rolls.

BALTIMORE IMPORTS

WEEK ENDING APRIL 4, 1925

National City Bank, Malmen, Gothenburg, 152 rolls news print.

E. M. Sergeant & Co., Malmen, Gothenburg, 1,223 bls. wood pulp.

(*Continued on page 68*)

The B C INC.

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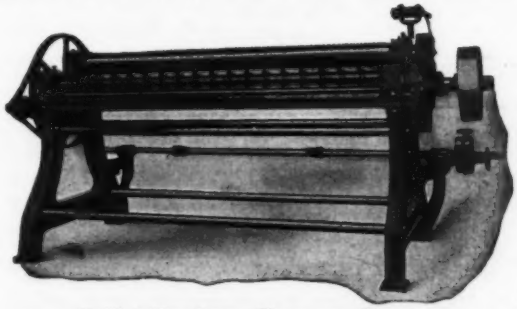

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Imports of Paper and Paper Stock

(*Continued from page 66*)

Scandinavian Pulp Agency, Inc., Malmen, Gothenburg, 2,159 bls. wood pulp.

Scandinavian Pulp Agency, Inc., Tasmanic, Norrkoping, 2,500 bls. sulphate pulp.

Castle & Overton, Inc., ———, Germany, 735 bls. wood pulp.

National City Bank, McKeesport, St. Nazaire, 150 bls. rags.

E. J. Keller Co., Inc., Barbadian Aix la Chappelle, 66 bls. rags.

E. J. Keller Co., Inc., Barbadian, Aix la Chappelle, 99 bls. rags.

NORFOLK IMPORTS

WEEK ENDING APRIL 4, 1925

Johaneson, Wales & Sparre, Inc., Natirar, Hernosand, 3,000 bls. sulphate pulp, 500 tons.

PHILADELPHIA IMPORTS

WEEK ENDING APRIL 4, 1925

Paper Manufacturers Co., Winona, Genoa, 10 bls. wrapping paper.

H. Bayersdorfer & Co., Nevisian, Antwerp, 35 cs. surface coated paper.

S. S. Alcorn, W. Eldara, Antwerp, 27 bls. wrapping paper.

E. J. Keller Co., Inc., McKeesport, St. Nazaire, 89 bls. rags.

Castle & Overton, Inc., McKeesport, Bordeaux, 272 bls. rags.

Equitable Trust Co., London Mariner, London, 63 bls. waste paper.

Anglo-South American Trust Co., London Mariner, London, 174 bls. paper stock.

New York Trust Co., London Mariner, London, 33 bls. rags.

G. M. Graces & Co., W. Eldara, Antwerp, 311 bls. rags.

Penn Rag & Metal Co., W. Eldara, Antwerp, 9 bls. rags.

J. Walworth, W. Eldara, Antwerp, 56 bls. cotton waste.

S. Birkenstein Sons, Zarembo, Havre, 87 bls. rags.

Baring Bros. & Co., Ltd., Zarembo, Havre, 21 bls. rags.

Baring Bros. & Co., Ltd., Zarembo, Havre, 42 bls. bagging.

Castle & Overton, Inc., Zarembo, Havre, 345 bls. rags.

A. W. Fenton, Inc., Zarembo, Havre, 50 bls. rags.

S. Schapiro & Sons, Zarembo, Dunkirk, 70 bls. rags.

Castle & Overton, Inc., Zarembo, Dunkirk, 297 bls. rags.

National City Bank, Zarembo, Dunkirk, 105 bls. rags.

J. Milton Hagy Waste Works, Zarembo, Dunkirk, 66 bls. rags.

Katzenstein & Keene, Inc., Cabo, Santa Maria, Marseilles, 298 bls. rags.

Amsinck, Sonne & Co., Inc., Cabo, Santa Maria, Marseilles, 81 bls. rags.

Garcia & Diaz, Cabo, Barcelona, 6 bls. rags.

D. I. Murphy, Raifuku Maru, Hamburg, 52 bls. rags.

E. J. Keller Co., Inc., H. Luckenbach, Kobe, 250 bls. rags.

Congoleum Co., Indep. Hall, Dunkirk, 107 bls. rags.

McBlaine & Co., Indep. Hall, Dunkirk, 75 bls. cotton waste.

S. Birkenstein Sons, Indep. Hall, Havre, 24 bls. rags.

D. I. Murphy, Indep. Hall, Havre, 50 bls. rags.

National City Bank, Indep. Hall, Havre, 301 bls. rags.

E. J. Keller Co., Inc., Indep. Hall, Havre, 357 bls. rags.

Penn Rag & Metal Co., Indep. Hall, Havre, 300 bls. rags.

Penn Rag & Metal Co., Indep. Hall, Havre, 181 bls. bagging.

True & McClelland, Indep. Hall, Havre, 32 bls. old rope.

Bemis Bros. Bag Co., Indep. Hall, Havre, 74 bls. old rope.

Bemis Bros. Bag Co., Indep. Hall, Havre, 67 coils old rope.

H. Atkinson, London Mariner, London, 120 bls. old rope.

S. Birkenstein Sons, Winona, Genoa, 422 bls. old rope.

Castle & Overton, Inc., Maryland, London, 136 bls. rags.

Castle & Overton, Cabo, Hatteras, Genoa, 321 bls. rags

Castle & Overton, Inc., ———, Germany, 825 bls. wood pulp.

NEW ORLEANS IMPORTS

WEEK ENDING APRIL 4, 1925

Castle & Overton, Inc., Meanticut, Belgium, 111 bls. rags.

Castle & Overton, Inc., West Harshaw, England, 135 bls. rags.

BOSTON IMPORTS

WEEK ENDING APRIL 4, 1925

Wilkinson Bros. & Co., Inc., Kolsnaren, Gothenburg, 70 bls. paper.

Wilkinson Bros. & Co., Inc., Kolsnaren, Gothenburg, 40 rolls paper.

The Borregaard Co., Inc., Kolsnaren, Gothenburg, 750 bls. wood pulp.

Scandinavian Pulp Agency, Inc., Kolsnaren, Gothenburg, 3,811 bls. kraft pulp.

Scandinavian Pulp Agency, Inc., Kolsnaren, Gothenburg, 762 bls. sulphite pulp.

Scandinavian Pulp Agency, Inc., Kolsnaren, Gothenburg, 635 bls. sulphite pulp.

J. Andersen & Co., Kolsnaren, Gothenburg, 2,000 bls. sulphite pulp.

J. Andersen & Co., Kolsnaren, Stockholm, 1,500 bls. sulphite pulp.

J. Andersen & Co., A. Jensen, Hernosand, 3,600 bls. sulphate pulp.

Bulkley, Dunton & Co., A. Jensen, Iggesund, 1,450 bls. sulphite pulp.

Bulkley, Dunton & Co., A. Jensen, Iggesund, 425 bls. kraft pulp.

Hartig Pulp Co., A. Jensen, Iggesund, 1,625 bls. kraft pulp.

Pagel, Horton & Co., Inc., A. Jensen, Gefle, 7,000 bls. sulphite pulp.

Scandinavian Pulp Agency, Inc., Blommersdyk, Rotterdam, 125 bags cellulose.

E. J. Keller Co., Inc., Blommersdyk, Rotterdam, 119 bls. wood pulp.

Pagel, Horton & Co., Inc., W. Gotomska, Husum, 12,000 bls. sulphate pulp.

E. Butterworth & Co., Inc., Blommersdyk, Rotterdam, 38 bls. rags.

R. Blank, Blommersdyk, Rotterdam, 243 bls. paper stock.

Maurice O'Meara Co., Blommersdyk, Rotterdam, 41 bls. burlaps.

G. M. Graves & Co., Blommersdyk, Rotterdam, 132 bls. rags.

G. M. Graves & Co., Blommersdyk, Rotterdam, 46 coils old rope.

Bids and Awards for Government Paper

WASHINGTON, D. C., April 8, 1925.—The Government Printing Office has received the following bids for 8,000 pounds of No. 2 quality 26 x 38—No. 10 binders board: Mathers Lamm Paper Company, $71.15 per ton; Dobler & Mudge, $100; C. B. Hewitt & Bros., $85; Philip Rudolph & Son, $90; Holliston Mills, Inc., $83; Kerr Paper Mills, $69.

The following bids were also received for 2,000 pounds of No. 2 quality 26 x 38—No. 10 binders board: Mathers Lamm Paper Company, $74.60. The other bids are similar to those quoted above.

The Aetna Paper Company has been awarded the contract by the Bureau of Supplies and Accounts, of the Navy Department for furnishing 3,000 reams of 16 x 21—20 pounds, white printing paper at $7,536.80.

W. L. Jones will furnish 1,200 reams of 8 x 13 absorbent mimeograph paper at $475.20. The same firm will also furnish 35,000 reams of 8 x 10½ and 8 x 13 absorbent mimeograph paper at $11,650. Bids for these items were received on March 3.

The Barton, Duer & Koch Paper Company has been awarded the contract for furnishing the Government Printing Office with 10,150 pounds, 700 reams of 21 x 32—14½, No. 8, onion skin paper at 23.5 cents per pound, bids for which were received on March 13.

The Old Dominion Paper Company will furnish 10,000 pounds (200 reams) of 25 x 38—50, machine finished salmon book paper at 7.43 cents per pound; and the Barton, Duer & Koch Paper Company will furnish 5,750 pounds (50 reams) of 22½ x 28½—115, unwrapped white index bristol board at 16.75 cents per pound. Bids for these items were received on March 16.

Using Note Paper for Fraudulent Purposes

T. E. Lloyd, secretary of the Hinde & Dauch Paper Company of Canada, Toronto, recently reported to the local police that the note paper of the company has been forged in a plan to extract cash from people in different parts of the United States. He says that certain parties across the border, who had patented articles and had them registered at Washington, lately received letters purporting to be from the Hinde & Dauch Company, offering them large sums of money for their patents. The recipient of the letter was in every case waited upon shortly after by a clever appearing individual, who said that he had been authorized to negotiate for the transfer of the patent. The man claimed to be a patent solicitor from Toronto and for his services, said that he was entitled to a percentage based upon the actual amount to be paid for the patent. In several cases the swindler was successful in getting liberal sums of money but one of his intended victims arrived in Toronto recently and by making a call upon the firm revealed the swindle.

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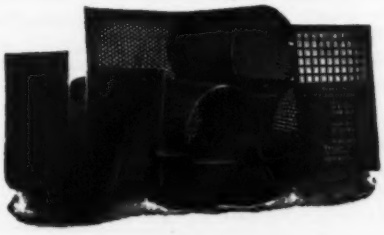

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Athens Implement & Manufacturing Co.
ATHENS, WIS.

New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
Wednesday, April 8, 1925.

The spirit of optimism which has marked the paper market in face of all odds is not as pronounced today as it was a month or even a week ago. The paper men are dropping the mask and are at last beginning to discuss in conversational tones what they would not even admit in whispers a short time ago. Market conditions are not anything to gloat over. Business straggles along in a half-hearted way and the trade is spiritless and more or less discouraged. It looks now as though the market would wake up some morning to find itself plunged into the summer dullness without ever having realized anything like the activity which was predicted at the beginning of the year. There have been times when business seemed in a climbing mood but its strength has always weakened and, though it may have climbed up a round or two of the ladder, it has always fallen back exhausted and inert. Those are the real facts and even the glow of optimism cannot make them otherwise. The first quarter of the year was not so bad when compared with the first quarter of 1924 but one is hard driven when he has to select 1924 as a shining mark to duplicate. January, February and March fell far below expectations and the first week of the new quarter finds the market less active than it was at the close of March. Hot weather is almost at the door and hot weather is never conducive to good business. With four or five months of good business back of them the paper men might now go forward with a heart for any fate but they have not had that four or five months of banner business. They think of the struggling, staggering condition of business last summer and the thought brings grave foreboding. It is not a pleasing outlook and it might just as well be admitted now for confession is good for the soul even though it may not stimulate business.

News print alone is standing right up to expectations. It would seem as though it could be relied upon to keep on doing so until the vacation period is ushered in when publishers are inclined to cut down on their publications, when advertising and circulation are both in the habit of falling off, thus curtailing to some extent the call for news print.

One searches in vain for anything else to duplicate the condition of news print. Fine papers are doing fairly well but orders are not up to the usual demand at this time of the year. Coarse papers have not been doing any too well at any time since the first of the year and they are more than ordinarily dull just now.

The Easter demand helped out boards and they have been doing a trifle better but conditions are not any too good.

Mechanical Pulp

Mechanical pulp is in very good shape because of the fine condition news print is in. Prices are holding up and good business is expected to continue right up to the summer.

Chemical Pulp

The chemical pulp market is weakening at the present time and it is feared that it will continue to do so for some time. Shipments from Sweden are coming in with greater regularity than is customary at this time of the year and, in fact, there has not been the interruption that is usually caused by the severe winters in Sweden. Sweden had a practically open winter. As a matter of fact it is said that it has been the most open winter it has seen in 200 years. This has had an opposite effect on the market to that which would naturally be expected and a prominent pulp man stated to the writer that it has brought about a most unusual condition which exists today when stock on dock is selling at less money than it would cost to replace.

Old Rope and Bagging

Things continue quiet in the old rope and bagging market. Orders are very backward in both and the tendency of prices is to sag. In fact prices have already dropped but the more advantageous figures have failed to animate the market any and extreme sales efforts are being resorted to to annex the meager orders which are more and more becoming a call limited to the close necessities of the buyers.

Rags

The rag market is getting into a deplorable state for buying has not been brisk for some time and it shows no signs of picking up now. There is said to be more stock on the market at the present time than at any time since the first of the year. The dealers are well stocked on many grades but are very shy on others which were depleted during the winter when collections were hampered. They find themselves in the unpleasant condition today of having much stock in certain grades which they would like to move but cannot while they have orders for other grades for which they lack the stock to fill orders. The call is long on some grades and decidedly short on others. If conditions continue as they are now for two or three weeks longer it is almost certain to send prices tumbling to lower levels.

Waste Paper

Waste paper is by no means responding to such demand as is normal at this period of the year. Collections are especially large now as the collectors are many of them reaping a harvest in collections to make up for the famine during the winter months. The demand, however, is not good enough to keep up with the supply.

Twine

Easter helped out the twine men but even thus early there are signs of twine dropping back to the even course of poor business which has been its lot for practically many months.

Machinery of Keystone Mills Being Sold

UPPER DARBY, Pa., April 6, 1925.—The land on which is located the plant of the Keystone Paper Mills Company, which was damaged by fire about a year ago is to be sold for building purposes. The land is very valuable as it is situated directly at the end of the 69th street terminal of the Philadelphia Elevated Railroad and is about the only undeveloped land on the outskirts of Philadelphia.

Some of the machinery in the plant, including the paper machine, was very much damaged by the fire. The beaters, washers, two Noble & Wood Junior Jordans, an 84 inch Moore & White rotary sheet cutter with layboy, and a 74 inch Oswego automatic power paper cutter however were undamaged and are being offered for sale by the Gibbs-Brower Company, paper and pulp mill brokers.

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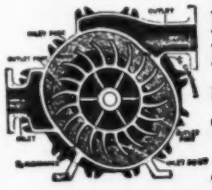

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THE NASH ENGINEERING CO.
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Flexible Steel Lacing Co.
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Quick, easy application with a hammer, is the method of applying this modern lacing. Note the straight line pull, the compression grip of steel on the belt end and the take-apart hinge with a steel pin.

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GENERAL Aluminum Sulphate CHEMICAL
GENERAL CHEMICAL COMPANY 40 RECTOR STREET, NEW YORK

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, April 8, 1925.

The week in the chemical market has been for the most part a repetition of the previous week or two. Prices are remaining fixed but the demand for certain commodities has been weakening slightly. Contact tonnage is moving in fairly good shape but spot business is decidedly backward and there is every indication that business in this market will continue indefinitely in this condition with buyers stocking well to their contract arrangements but with spot buying being closely limited to the immediate necessities of the buyers. Sales efforts are being increased but they do not seem to stimulate conditions. There is just so much business to be done and everything in the way of sales energy seems to be powerless to bring about any material betterment.

BLANC FIXE.—The week was a fair one for blanc fixe. No ground was lost and no ground was gained. The future looms up with an element of doubt and while a betterment is due here, chemical men are doubtful as to whether it will materialize or not. In the meanwhile prices remain unchanged, the pulp selling at from $60 to $70 a ton and the powder at from $75 to $90 a ton.

BLEACHING POWDER.—While bleaching powder is holding up fairly well there is plenty of reminders that the period when it slackens up for the off season of the year is not far off. A few weeks more of fair business is the best that can be hoped for before bleaching powder plunges into the hot water dull period. The present schedule is being maintained and it is doubtful if there will be any recession from it. Opinion grows that the manufacturers will adopt a similar policy as last year and that they will cut down their production during the summer, aiming to meet the demand but guarding against the accumulation of stock. The price remains at 1.90 cents a pound.

CAUSTIC SODA.—While the contract tonnage is moving in fairly satisfactory shape for caustic soda, the spot market is gradually weakening. Chemical men have been very confident of the future of caustic soda but the weakening which has been in progress for some time cannot continue much longer without upsetting their calculations. But in spite of the limited spot buying the price continues to hold firm at from 3.10 to 3.15 cents a pound.

CASEIN.—Casein continues to do very nicely as it has been doing for a considerable time but its condition can hardly be viewed in the light of improvement. The price hangs at from 12 to 13 cents a pound.

CHINA CLAY.—China clay which has been enjoying several active weeks keeps up its good work although the position it occupies today is no more advantageous than it has been. In view of the fact that the commodity which stands up to satisfactory business week after week is the exception rather than the rule, china clay may be spoken of as in a thoroughly healthy state. The imported grades are quoted at from $16 to $20 a ton and the domestic grades at from $12 to $15 a ton.

CHLORINE.—Although the demand for chlorine has suffered a little something of reaction it is still having a very satisfactory call and conditions seem to indicate that there will be a betterment at an early date. It is still quoted at from $4.50 to $7.00 a pound in tanks.

ROSIN.—Rosin which has been looking up for a considerable period keeps right on going and the rosin men certainly have no cause to complain and are looked upon with envy by some of the chemical men who devote their attention to less popular commodities. It looks at this writing as though rosin would continue without interruption for some time. The prices at the naval stores centers range from $6.65 to $6.85.

SALT CAKE.—The looked for improvement in salt cake is still in the future but the demand is fairly satisfactory and in-as-much as salt cake is losing no ground there is no discouragement expressed over its present condition. There has been no change in price, the present quotation being from $17 to $20 a ton.

SODA ASH.—So satisfactory has been the progress made by soda ash that improvement is hardly to be looked for and yet the demand appears to be getting slightly better all the time. The future is full of good prospects. The price is still 1.38 cents a pound on a flat basis at the works.

SULPHATE OF ALUMINA.—Sulphate of alumina is very firm just now and it is evidently closing in on a period of betterment. The price is from 1.40 to 1.45 cents a pound for the commercial grades at the Eastern works and from 2.10 to 2.25 cents a pound for the iron free.

SULPHUR.—There is no change in surphur and has been none for some time, the contract shipments going forth according to schedule and the price remaining at from $18 to $19 a ton.

TALC.—The recent advances in price of talk has not effected the market and the demand continues uniform and satisfactory. The price is from $17 to $18 a ton.

To Take Up Status of Association Activities

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., April 2, 1925.—The legal status of trade association activities, particularly statistical service rendered by them, will be taken up by Secretary of Commerce Hoover with Attorney General Sargent, the former stated. Describing the problem as perennial, Secretary Hoover declared that he would stick to the job of clearing up the doubt surrounding the legality of compilation and dissemination of current statistical data by an organization in any industry. He is hopeful that during the tenure of office of the new Attorney General a straight case on statistics may be put through the courts. All pending cases involve an alleged conspiracy to use the statistics for purposes of controlling production and prices. The stand taken by Secretary Hoover is that data on production, stocks and prices may be misused but that this does not render the statistical service itself illegal.

Secretary Hoover described the reform in the policy and procedure of the Federal Trade Commission as very constructive, but pointed out that the Commission cannot determine the lawfulness of the inherent character of the statistical service rendered by trade associations. That must be determined by the Supreme Court in a case brought by the Department of Justice under the Sherman Act, he said. In a test case, he said, the issue must not be obscured by the allegation that the statistical service has been used to defeat competition.

American Spiral Pipe Works Issues Catalogue

The American Spiral Pipe Works, Chicago, has just issued a very handsome catalogue of Forged Steel Pipe Flanges, Forged Tubular Products, Seamless Rolled Steel Rings and Corrugated Boiler Furnaces.

The exhaustive way in which the subject has been covered and the convenience of arrangement is especially striking. There is no extraneous matter, yet nothing of practical value has been omitted.

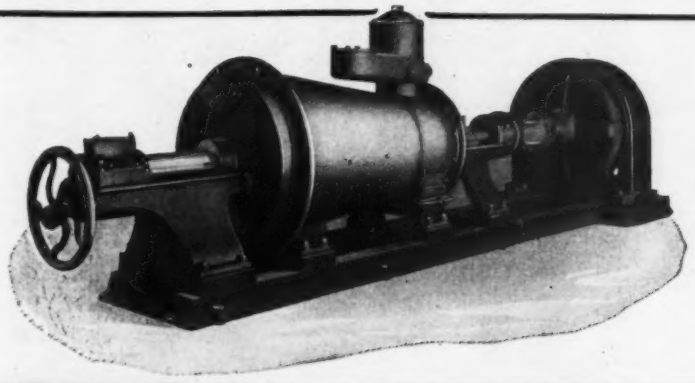
Primarily it is a handbook of valuable information for engineers, designers and operators of power systems.

Formulas and data tables of vital information are so placed as to permit of quick and easy reference. It is among the first complete publications to embody the new American Engineering Standards of 400, 600 and 900 pounds W. S. P. There are also complete data covering existing standards.

As you will see, it is profusely illustrated with full-size cross sections, which, with tables and some halftone illustrations, intelligently convey the best modern practice in the field of increasing pressures and superheat.

There is also an interesting section on corrugated steel furnaces.

Copies will be sent free on requests made to the American Spiral Pipe Works, Chicago.



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Two-Tower Acid Systems now in operation or building.

Jenssen Spray Type Cooler
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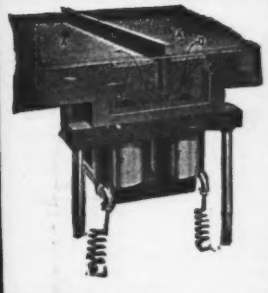

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We will send Bulletin and all information on request.

The Roland T. Oakes Co.
HOLYOKE, MASS

A Remarkable Range of Grades, Textures and Weights

Orr Endless Felts can now be obtained up to 86 feet in length.

With our enlarged new equipment we can now furnish Paper Manufacturers with endless felts up to 86 feet in length.

Paper Manufacturers who carefully check manufacturing costs, and also strive to produce more and better paper at a lower cost per ton, prefer the unvarying quality and long service of ORR felts. A trial of them will bring about a preference that will be lasting.

THE ORR FELT & BLANKET COMPANY, Piqua, Ohio

APR 20 1925

Market Quotations

Quoted by Hepburn & Co., No. 74 Broadway, N. Y. City, to whom all inquiry for quotations on these or any other Securities is referred.

BONDS	BID	OFFERED
Abitibi Power and Paper, Gen. 6s 1940	99	102*
Advance Bag and Paper, 7s 1943	97	100*
Aroostook Pulp and Paper, 6s 1925	99	...
Bastrop Pulp and Paper, 7½s 1932	104	108*
Brompton Pulp and Paper, 6s 1927	93	95
Beaver Board, 8s 1933	87	89
Bedford Pulp and Paper, 6½s 1942	98	...
Berkshire Hills Paper Co., 8s 1941	...	80
Beaver Board, N. Y. Curb, 8s 1933	93	95
Beaver Products Corp,, 7½s 1942	102	104
Belgo Canadian Paper, 6s 1943	99	100
Brown Paper Co., 8s 1931	102	105*
Berlin Mills, 5s 1931	99	...
Bryant Paper Co., 6s 1942	98	101
Brown Company Serial, 6s 1925-43	97	100
Central Paper, 6½s 1925-42	90	95
Cape Breton Pulp and Paper, 6s 1932	98	102
Carthage Sulphite Pulp and Paper, 8s 1941	40	50
Champion Coated Paper Co., 6s 1924-34	...	102
Champion Fibre Co. Notes, 8s 1930	101	...
Cherry River Paper, 5s 1929	97	100*
Chicoutimi Pulp Co., 6s 1943	63	...
Donnaconna Paper Co., Ltd., 6s 1940	98	100
Eddy Paper, 7s 1931	96	...
Eagle Paper, 6½s 1932	96	100
Escanaba Paper, 6s 1933	84	88
Fox River Paper, 7s 1931	100	...
Fort Orange Paper Co, 7s 1942	90	...
Eddy Paper Co., 7½s 1931	94	98
Gilbert Paper Co., 7s 1927	96	...
Gilbert Paper Co., 6½s 1923-29	101	102*
Hammermill Paper Co., 6s 1930-39	98	...
Hercule Corp'n, 8s 1936	98	101
Hummell, Ross Fibre Corp., 7s 1925	90	...
Jessup & Moore Paper Co., 6s 1939	93	97
Kenmore Pulp and Paper Co., 6s 1937	89	...
Lake Superior Pulp and Paper, 6s 1941	105	...
Mattagami Pulp and Paper, 6s 1937	90	...
Marinette & Menominee, 7½s 1936	103	105
Mengel Company, 7s 1934	100	103
National Paper and Type, 6s 1947	96	99*
Oswego Falls Corp., 8s 1942	101	103*
Orono Pulp and Paper, 5s 1941	93	96*
Orono Pulp and Paper, 6s 1943	97	100*
Oxford Paper Co., 6s 1947	99	...
Parsons Pulp & Lumber 1st 7s 1928	92	...
Paterson Parchment Paper, 5½s 1927-28	97	99
Paterson Parchment, 6s 1938	97	99
Parker, Young Co., 6½s 1944	92	96
Price Bros. & Co., Ltd., 6s 1943	99	101
Provincial Paper Mills, Ltd., 6s 1940	97	...
Riordon Co., Series A, 8s 1940	108	110
Riordan Paper, 6s 1924	91	94
Riordan Pulp and Paper, Ltd., 6s, 1929	28	30
River Raisin Paper, 8s 1936	104	106
St. Regis Paper, 6½s, 1929-35	97	102
Smith (Howard) Paper Mills, 7s 1941	93	95
Smith (Howard) Paper Mills, 6s 1934	94	...
St. Croix Paper, 5s 1923-37	95	...
Stevens & Thomson Paper, 6s 1942	88	92
Spanish River Pulp and Paper, 6s 1931	105	108
Spanish River Pulp and Paper, Gen 8s 1941	106	109
Ticonderoga Pulp and Paper Co., 6s, 1940	91	95
Ticonderoga Pulp & Paper 1-5, 1930	88	93
Whittaker Paper, 1st 7s 1942	94	98
Watab Paper Co., 6½s 1942	99	102
Waterway Paper Products, 7s 1924-27	95	100
Wayagamack Pulp and Paper, Ltd., 6s 1951	87	90

STOCKS	BID	ASKED
Abitibi Power and Paper, Com	65	67
Abitibi Power and Paper, Pfd	106	115*
Advance Bag and Paper, Com	8	12*
Advance Bag and Paper, Pfd	70	75*
Beaver Board, Com	5	8
Beaver Board, Pfd	38	...
Bryant Paper, Cap	12	...
Bryant Paper, Pfd	9	...
Brompton Pulp and Paper, Cap	23	25
Chicago Mill & Lumber Co., Com	63	...
Chicago Mill & Lumber Co., Pfd	98	104
Crown Williamette, Com	93	98*
Crown Williamette, 7% A, Pfd	98	SW
Donnaconna Paper, Pfd	95	100
Great Northern Paper, Cap	250	...
Howard Smith Paper Co., Com	22	23
Howard Smith Paper Co., Pfd	70	75
Jessup & Moore Paper, Pfd	74	78
International Paper Co., Com	48	50
International Paper Co., Pfd	73	75
Mengel Company, Com	37	40
Mengel Company, Pfd	76	...
Oxford Papers, Com	93	97
Oxford Paper Co., Pfd	...	101
Provincial Paper Co., Com	94	98
Provincial Paper Co., Pfd	99	...
Price Brothers, Cap	...	39
St. Croix Paper	185	215
St. Maurice Paper Co., Cap	83	88
St. Regis Paper Co., Cap	28	31
Smith (Howard) Paper Co., Ltd., Com	25	28
Smith (Howard) Paper Co., Ltd., Pfd	85	87
Spanish River Pulp and Paper, Com	105	107
Spanish River Pulp and Paper, Pfd	115	...
Ticonderoga Pulp and Paper, Cap	145	...
West Virginia Pulp and Paper. Cap	44	47
West Virginia Pulp and Paper, Pfd	85	100
Whittaker Paper, Com	13	...
Whittaker Paper, Pfd	50	...

* Nominal.

Paper

(F. o. b. Mill)

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@32.00
Superfine	14.00	@32.00
Tub Sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—		
Rolls, contract	3.50	@ 3.90
Rolls, transit	3.75	@ 4.25
Sheets	4.00	@ 4.25
Side Runs	3.25	@ 4.00
Book, Cased—		
S. & S. C.	7.00	@ 9.75
M. F.	6.25	@ 8.75
Coated and Enamel	8.00	@15.00
Lithograph	8.00	@15.00
Tissues—		
White No. 1	.70	@ .90
Colored	1.00	@ 2.25
White No. 2	.70	@ .80
Anti-Tarnish	1.25	@ 2.50
Kraft	.85	@ .95
Manila	.70	@ .80
Kraft—		
No. 1 Domestic	5.50	@ 6.25
No. 2 Domestic	4.50	@ 4.75
Imported	5.50	@ 5.75
Manila—		
No. 1 Jute	9.25	@ 9.50
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.00
Fibre Papers—		
No. 1 Fibre	5.50	@ 6.00
No. 2 Fibre	4.75	@ 5.25
Common Bogus	2.50	@ 2.75
S. Screening	3.25	@ 3.75
Card Middler	4.00	@ 5.00
Boards—per ton—		
News	45.00	@47.50
Straw	50.00	@55.00
Chip	50.00	@52.50
Binders' Boards	75.00	@80.00
Sgl. Mla. Ll. Chip	60.00	@62.50
Wood Pulp	70.00	@75.00
Container	62.50	@67.50
Sulphate Screenings—		
Coarse	.80	@ .90
Refined	1.75	@ 2.00
Ground Wood—		
Screenings	20.00	@25.00
Glassine—		
Bleached, basis 25 lbs.	13.00	@16.00
Bleached, basis 20 lbs.	15.00	@16.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported	34.00	@38.00

(F. o. b. Mill)

No. 1 Domestic	28.00	@32.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	3.75	@ 4.50
Easy Bleaching	2.90	@ 3.25
No. 1 strong unbleached	2.75	@ 3.25
No. 2 strong unbleached	2.45	@ 2.80
No. 1 Kraft	2.90	@ 3.00
Sulphate—		
Bleached	3.75	@ 3.95

(F. o. b. Pulp Mill)

Sulphite (Domestic)—		
Bleached	3.75	@ 4.50
Easy Bleaching Sulphite	2.90	@ 3.25
News Sulphite	2.45	@ 2.75
Mitscherlich	3.25	@ 3.75
Kraft (Domestic)	2.70	@ 3.25
Soda Bleached	4.00	@ 4.25

Domestic Rags

New Rags

Prices to Mill, f. o. b. N. Y.

Shirt Cuttings—		
New White, No. 1	14.50	@15.25
New White, No. 2	8.00	@10.00
Silesias No. 1	10.50	@11.50
New Unbleached	14.00	@15.00
Washables	6.50	@ 9.25
Fancy	975	@10.25
Blue Overall	10.50	@11.50
New Blue Prints	7.50	@ 8.50
New Soft Blacks	5.75	@ 6.20
Mixed Khaki Cuttings	5.75	@ 6.50
Pink Corset Cuttings	10.50	@11.00
Pink Muslin	10.25	@10.75
New Light Seconds	3.25	@ 3.50
O. D. Khaki Cuttings	6.50	@ 7.50
Men's Corduroy	6.00	@ 6.75
New Mixed Blacks	4.00	@ 5.00

Old Rags

White, No. 1—		
Repacked	8.00	@ 9.00
Miscellaneous	6.50	@ 7.00
White, No. 2—		
Repacked	4.75	@ 5.25
Miscellaneous	4.00	@ 4.50
St. Soiled, White	3.00	@ 3.50
Thirds and Blues—		
Repacked	4.00	@ 4.25
Miscellaneous	3.25	@ 3.50
Black Stockings	4.00	@ 4.50
Roofing Rags—		
Cloth Strippings	3.15	@ 3.25
No. 1	3.15	@ 3.25
No. 2	2.85	@ 3.05
No. 3	2.00	@ 2.25
No. 4	2.75	@ 2.85
No. 5A	1.80	@1.50

Foreign Rags

New Light Silesias	9.50	@10.50
Light Flannelettes	11.00	@12.00
Unbl'chd Cottons	13.75	@14.75
New White Cuttings	14.00	@15.00
New Light Oxfords	10.00	@11.00
New Light Prints	9.00	@10.00
New Mixed Cuttings	4.25	@ 4.75
New Dark Cuttings	3.75	@ 4.25
No. 1 White Linens	10.50	@11.50
No. 2 White Linens	7.50	@ 8.50
No. 3 White Linens	6.25	@ 6.75
No. 4 White Linens	4.50	@ 5.50
Old Extra Light Prints	4.25	@ 4.75
Ord. Light Prints	3.75	@ 425
Med. Light Prints	3.75	@ 4.25
Dutch Blue Cottons	4.00	@ 4.50
Ger. Blue Cottons	4.00	@ 4.25
Ger. Blue Linens	425	@ 4.75
Checks and Blues	3.50	@ 3.75
Linsay Garments	2.50	@ 2.60
Dark Cottons	2.40	@ 2.50
Shoppery	2.30	@ 2.40
French Blues	4.00	@ 4.50

Bagging

Prices to Mill F. o. b. N. Y.

Gunny No. 1—		
Foreign	3.00	@ 3.10
Domestic	3.15	@ 3.25
Wool Tares, light	2.60	@ 2.70
Wool, Tares, heavy	2.70	@ 2.80
Bright, Bagging	2.55	@ 2.65
Mixed Bagging	2.30	@ 2.40
Sound Bagging	2.20	@ 2.30
Roofing Bagging	1.60	@ 1.70
Manila Rope—		
Foreign	6.25	@ 6.75
Domestic	6.50	@ 7.00
New Bu. Cut	3.50	@ 4.00
Hessian Jute Threads—		
Foreign	4.00	@ 4.25
Domestic	3.25	@ 3.50

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, White, No. 1	3.60	@ 3.90
Hard, White, No. 2	3.25	@ 3.50
Soft, White, No. 1	2.90	@ 3.15
Flat Stock—		
Stitchless	1.45	@ 1.55
Overissue Mag	1.45	@ 1.55
Solid Flat Book	1.40	@ 1.50
Crumpled No. 1	1.25	@ 1.35
Solid Book Ledger	1.80	@ 1.90
Ledger Stock	1.60	@ 1.70
New B. B. Chips	.65	@ .75
Manilas—		
New Env. Cut	2.45	@ 2.60
New Cut. No. 1	1.75	@ 2.00
Extra No. 1 old	1.40	@ 1.50
Print	1.20	@ 1.30
Container Board	1.00	@ 1.10
Bogus Wrapper	1.00	@ 1.10
Old Krafts Machine compressed bales	2.05	@ 2.15
News—		
No. 1 White News	1.95	@ 2.10
Strictly Overissue	1.05	@ 1.15
Strictly Folded	.95	@ 1.05
No. 1 Mixed Paper	.65	@ .75
Common Paper	.45	@ .55

Twines

Cotton—(F. o. b. Mill)—		
No. 1	.43	@ .48
No. 2	.41	@ .43
No. 3	.40	@ .42
India. No. 6 basis—		
Light	.19	@ .20
Dark	.17	@ .19
R. C., 18 basis	.39	@ .41
A. B. Italian, 18 Basis	.56	@ .61